

**Expenditures of**

**Inland Waters Trout**

**Stamp Revenues**

**Fiscal Years 2000-2003**

Administrative Report 52

## Our Mission:

To protect and enhance our natural resources:  
our air, land and water;  
our wildlife, fish and forests  
and the ecosystems that surround them.

To provide a clean, sustainable environment  
and a full range of outdoor opportunities.

To insure the right of all Wisconsin citizens  
to use and enjoy these resources  
in their work and leisure.

To work with people  
so that we understand their views  
and can carry out their will.

And in this partnership with our citizens,  
consider the future  
and those who will follow us.



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# BACKGROUND OF THE INLAND WATERS TROUT STAMP PROGRAM

## *Creation of the Inland Waters Trout Stamp Program*

The inland waters trout stamp program was created in 1977 to provide additional funding for improving trout habitat. The Wisconsin Department of Natural Resources has a long history of successful trout stream habitat management. Work began with the federal work programs in the 1930's, and improved as more successful methods were developed over the history of the program. Only limited work could be accomplished due to limited funding (\$140,000) until the trout stamp program began in 1977. Wisconsin is now envied by other states because of the amount and dedication of the trout stamp funds for habitat improvement.

The number of trout stamps sold has varied from 108,000 (during the drought of 1990) to 195,000 during 1981. About 130,000 stamps have been sold annually over the last 10 years. In addition, Patron License holders (currently nearly 90,000) support the Inland Waters Trout Stamp program. – see Table 2 on page 7. DNR managers, biologists, and technicians have used the money to improve an average of 25 miles of stream and 1 spring pond per year. This has resulted in about 620 miles of stream improved out of a total of 10,200 miles of trout stream in Wisconsin. It is important to note that, many of the DNR personnel working on trout habitat projects are not paid by trout stamp funds, therefore a significant amount of non-trout stamp dollars support trout habitat work. About \$400,000 per year is currently spent on inland trout programs from general fishing license fees, federal Sport Fishing Restoration (SFR) funding and donations.

Research and management evaluations have proven the positive results of stream improvement. Numerous DNR Technical Bulletins and Research Reports document increased numbers and size of trout in improved areas. Many anglers seek out streams with habitat work, knowing that good fishing will likely be found there.

In the past decade, the Department has expanded the use of trout stamp money to other aspects of trout stream habitat management. Since 1992, these funds have included maintenance of habitat improvements, which is vital to insuring the long-term benefits of habitat work. Trout population surveys were added as a viable use in 1998. Surveys are very important for planning habitat improvement projects and evaluating the results of funded projects on improving trout populations. With continued public support, these funds will provide for increased trout fishing opportunities and increased quality of trout habitat into the future.

## *Guidelines for the use of Inland Waters Trout Stamp revenues*

Wisconsin state statute 29.191(4)(e) states: "The Department shall expend the receipts from the sale under this subsection of inland waters trout stamps on improving and maintaining trout habitat in inland trout waters, conducting trout surveys in inland trout waters and administering this subsection.<sup>1</sup>" In addition to applying to trout species, these statutes define the geographic and program requirements of the Inland Waters Trout Stamp Program.

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<sup>1</sup> Wisconsin Statutes and Annotations 1999-2000 (45th Edition). State of Wisconsin, Madison WI.

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## Geographical Requirement

Projects that use trout stamp revenues must be geographically focused on Wisconsin's inland trout waters. These revenues may not be used on portions of Great Lakes tributaries that are only accessible to anadromous trout and salmon.

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## Program Requirement

Projects funded by Inland Waters Trout Stamp money must specifically relate to inland trout habitat management (improving and maintaining habitat) or to conduct trout surveys.

Habitat management encompasses activities such as maintaining trout streams, improving existing streams and restoring streams capable of sustaining trout populations. Beaver control projects may be funded as part of habitat management. The purchase of equipment to conduct this work is authorized.

Surveys authorized must be limited to trout surveys in inland waters. Surveys funded to date include those designed to plan and evaluate habitat improvement projects, wild trout stocking, trout genetics and regulations.



**DNR Partners from the Coon Valley Conservation Club build lunkers**

## Sources of Revenue for the Inland Trout Stamp Account

All receipts from the sale of Inland Waters Trout Stamps are placed in the Inland Waters Trout Stamp Account. However, Inland Waters Trout Stamp revenues are not the only source of funds for the Inland Waters Stamp account. Some revenues from the sales of patron licenses and collector stamps also contribute. The price of each license to the consumer includes the base price of the license plus a fee that goes to the vendor. The vendor's fee is \$.75 for the patron license and \$.25 for the Inland Waters Trout Stamp. Calculations and references in this report exclude vendor's fees.

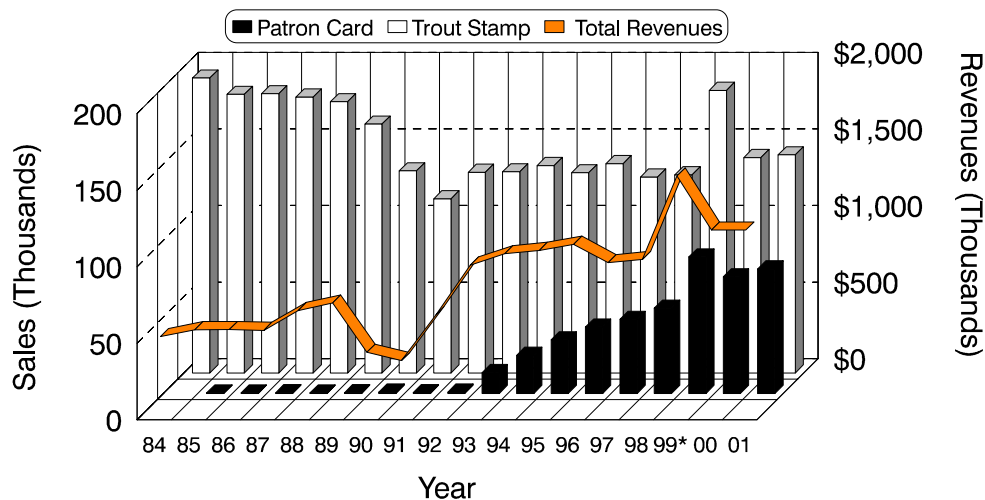
Currently the cost of each Inland Waters Trout Stamp is \$7.00. At present, the IWTS Account receives about \$1.70 for each Patron License sold. In addition, collectors can purchase souvenir Inland Waters Trout Stamps from previous years. All revenues from these sales contribute to the Inland Trout Stamp account. License sales that contribute to the Inland Waters Trout Stamp Account are shown graphically below and in a tabular presentation on page 6.

General fishing license fees, federal Sport Fishing Restoration (SFR) funding and donations also support the inland trout program.

A previous summary of expenditures of Inland Waters Trout Stamp sale revenues has been published. The report summarizes the fiscal years 1998-2001<sup>2</sup>.



**Table 1 -- License Sales Contributing to  
The Inland Waters Trout Stamp Account  
Fiscal Years 1984 - 2001**



\* - A spike in sales occurred in FY99 due to implementation of the Automated License Issuance System (ALIS)

<sup>2</sup> Topel, B. 2000. Expenditures of Inland Waters Trout Stamp Revenues. Administrative Report No. 46. Bureau of Fisheries Management and Habitat Protection, Department of Natural Resources, Madison, Wisconsin

## READER'S GUIDE

This report summarizes public support for the Inland Waters Trout Stamp (IWTS) fisheries program. It includes planned expenditures of IWTS revenues for fiscal years 2000, 2001, 2002 and 2003 as well as the total actual expenditures, from all funding sources, for fiscal years 2000 and 2001. (The fiscal year runs from July 1 of one year through June 30 of the next.) In many cases, actual expenditures exceed Inland Waters Trout Stamp contributions since other fishing license revenues and federal funds also support this program. Descriptions are presented for each IWTS project however, current accounting procedures do not allow tracking of actual expenses down to the project level in most cases. Each project is categorized as Habitat Improvement Activities, Research Studies and Surveys, or Inland Waters Trout Stamp program administration (the cost of producing the IWTS and this report). (Note: Within each category, projects are listed in alphabetical order by county.) Costs associated with travel, special services, supplies, program overhead, limited term employee (LTE) salaries and permanent salaries (which are directly funded by IWTS funds) are included. In the section on individual projects, "Budgeted IWTS Expenditures" include only costs of supplies and LTE salaries that are allocated during project approval. "Actual IWTS Expenditures" include not only costs of supplies and LTE salaries, but also permanent salaries, fringe benefits and program overhead which are assigned as funds are spent. "Total Actual Expenditure" figures in Table 1 and the "Total Program Expenditures (all funding sources)" for individual project description include IWTS expenditures for all cost categories as well as expenditures from other funding sources supporting these programs. While permanent employee salaries paid by IWTS funds are shown in this report and LTE salaries are included by project, fringe benefits for both are summarized only in Table 3 on page ten. Also in Table 3, total funding for program overhead (a prorated amount of additional costs to the fisheries program for annual leave, compensatory time and routine office and administrative costs) is shown. Actual costs for these expenses are spread across each individual program as noted above.

For those projects in which organizations outside of the DNR were partners in the project activity, that organization is identified.



**Restored area on Plum Creek**

It is important to the Wisconsin Department of Natural Resources that you find this report useful. To better meet this goal, direct your suggestions for improving this report to:

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For more information on trout fishing and many other subjects, visit the DNR Website at:

**<http://www.dnr.state.wi.us/>**

Find the ***Fish Wisconsin*** page by clicking on

***“Outdoor Activities”***

and then

***“Fishing”***

Thank you for your interest and feedback.

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*This publication is available in alternative format (large print, Braille, audio tape, etc) upon request. Please call (608) 267-7498 for more information.*



**Table 2 -- License Sales Contributing to  
The Inland Waters Trout Stamp Account**

	<b>Patron Card</b>	<b>Trout Stamp</b>	<b>Total Trout Anglers</b>	<b>Total Revenues</b>
1984		192,510	192,510	\$503,337
1985	218	181,960	182,178	\$548,513
1986	264	182,354	182,618	\$550,349
1987	398	180,096	180,494	\$544,367
1988	254	177,138	177,392	\$674,422
1989	449	162,447	162,896	\$723,358
1990	756	131,910	132,666	\$401,174
1991	539	113,640	114,179	\$346,440
1992	847	131,008	131,855	\$647,594
1993	13,486	131,308	144,794	\$971,516
1994	24,757	135,425	160,182	\$1,044,839
1995	34,942	130,701	165,643	\$1,066,710
1996	43,370	136,687	180,057	\$1,107,057
1997	48,368	127,840	176,208	\$986,760
1998	55,579	129,385	184,964	\$1,008,113
1999*	89,114	184,526	273,640	\$1,553,033
2000	76,175	140,603	216,778	\$1,019,645
2001	81,211	142,449	223,660	\$1,180,221

\* - A spike in sales occurred in FY99 due to  
implementation of the Automated License Issuance System  
(ALIS)

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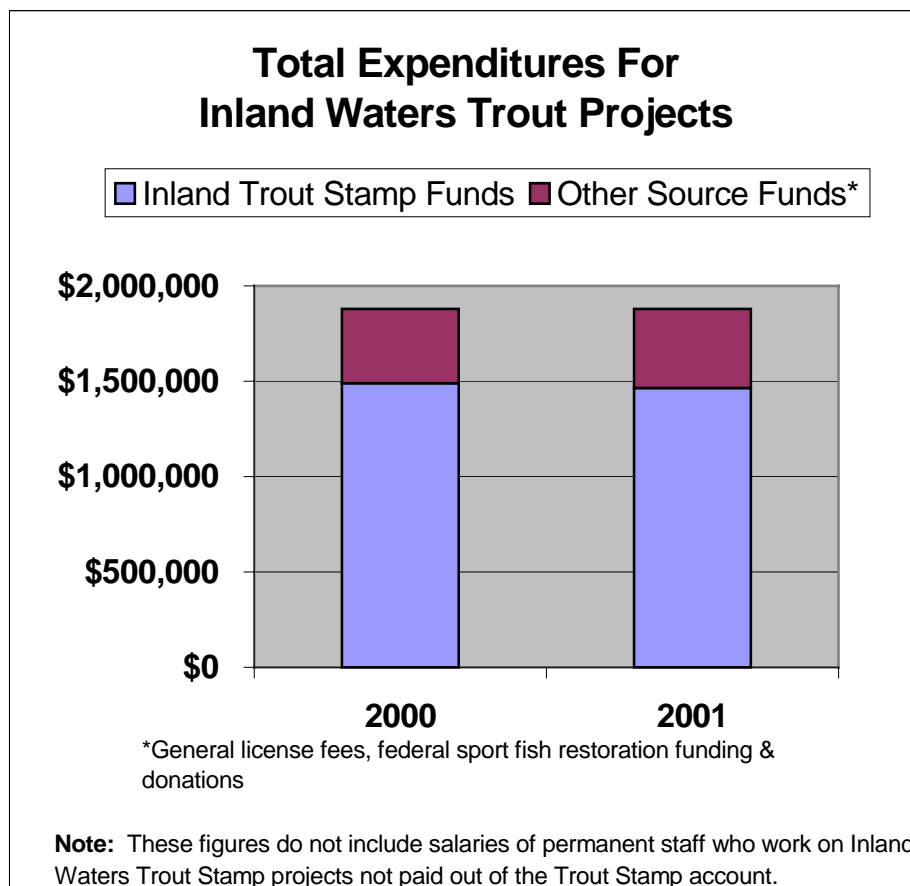
**Table 3 Expenditures of Inland Waters Trout Stamp revenues in fiscal years 2000-2003**

<b>Planned Expenditures</b>	<b>FY00</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03</b>
<b>Habitat Improvement</b>	\$1,067,360	\$1,145,199	\$745,278	\$609,302
<b>Research Studies and Surveys</b>	\$91,334	\$70,233	\$58,840	\$59,140
<b>Inland Waters Trout Stamp Program Administration</b>	\$12,200	\$6,000	\$6,000	\$6,000
<b>Permanent Salaries</b>	\$255,100	\$231,699	\$292,427	\$298,277
<b>Fringe Benefits</b>	\$118,460	\$132,830	\$152,973	\$156,032
<b>Program Overhead</b>	\$60,742	\$68,989	\$80,000	\$87,600
<b>Total Planned Expenditures of Inland Waters Trout Stamp Revenues</b>	<b>\$1,605,196</b>	<b>\$1,654,950</b>	<b>\$1,335,518</b>	<b>\$1,216,351</b>

<b>Actual Expenditures of Inland Waters Trout Stamp Revenues</b>	<b>\$1,490,251</b>	<b>\$1,465,138</b>	<b>N/A</b>	<b>N/A</b>
<b>Total Actual Expenditures for Inland Waters Trout Stamp Supported Projects (All Funding Sources)</b>	<b>\$1,879,045</b>	<b>\$1,878,221</b>	<b>N/A</b>	<b>N/A</b>

**Table 4 Annual Inland Waters Trout Stamp account activities, fiscal years 2000-2003.**

	FY00	FY01	FY02	FY03
<b>Beginning cash balance</b>	\$1,332,547 <sup>3</sup>	\$861,941	\$577,024	\$421,727 <sup>4</sup>
<b>Revenues</b>	\$1,019,645	\$1,180,221	\$1,180,221 <sup>4</sup>	\$1,180,221 <sup>4</sup>
<b>Total available funds</b>	\$2,352,192	\$2,042,162	\$1,757,245 <sup>4</sup>	\$1,601,948 <sup>4</sup>
<b>Total expenditures</b>	\$1,490,251	\$1,465,138	\$1,335,518 <sup>4</sup>	\$1,216,351 <sup>4</sup>
<b>Cash balance</b>	\$861,941	\$577,024	\$421,727 <sup>4</sup>	\$385,597 <sup>4</sup>



<sup>3</sup> A spike in revenue occurred in FY 99 because of DNR conversion to the Automated License Issuance System. The resulting higher cash balance carried forward as the increased revenue was budgeted out in spending programs.

<sup>4</sup>Estimated Figures

# HABITAT IMPROVEMENT

## Trout Habitat Maintenance

Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$129,559	\$98,987	\$124,959	\$95,663
Actual IWTS Expenditure <sup>6</sup>	\$234,592	\$131,104	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$281,205	\$178,398	N/A	N/A

Past trout stream enhancement projects require routine inspection and upkeep. This work takes many forms, varying by stream and the nature of the improvements made. In addition to replacing and repairing lunkers and other cover structures, habitat maintenance can include instream debris removal, replacement of riprap and fill where needed, and maintaining desired stream bank vegetation. A description of activities by project in this area follows.

### **Big Roche A Cri Creek – Adams Co.**

**Contact: Jason Spaeth**

#### **Funding Status: Complete**

Big Roche A Cri Creek had intensive habitat work done in 1980-82. This project updated that work by repairing 28 of 43 overhead bank covers, cutting encroaching tag alder, installing 34 brush bundles, and maintaining ten rock wing deflectors. Crews also added rock fill behind the structures as well as replaced stringer boards, planking and quarter logs to the structures and installed filter fabric. These types of repairs can now be done more effectively due to lighter-weight construction equipment not available when the original work was completed. This work should result in good trout cover for another 20 years.

### **4 County Area – Barron, Burnett, Polk, Washburn Co.**

**Contact: Byron Lund**

#### **Funding Status: Begins in 2002**

This work will continue to help improve and maintain work done to high quality trout streams over many years. It will include instream habitat maintenance on major trout streams in the four-county area including: McKenzie Creek, North Fork of the Clam River, Yellow River, Engle Creek, Five-Mile Creek, Dogtown Creek, Hickey Creek, Sawyer Creek, Beaver Brook, Bean Brook.

### **Iron & White Rivers, Big Brook – Bayfield Co.**

**Contact: Scott Toshner**

#### **Funding Status: Ongoing**

This project will maintain, repair and, if necessary, replace existing instream habitat structures that were installed in these streams as part of various projects from the '70's through the '90's. In the case of Big Brook, removal of these structures is necessary to eliminate erosion of the unprotected banks behind them. Iron River maintenance is done. White River is ongoing, maintaining structures as needed. There has been insufficient time to complete work on Big Brook.

### **Kinnickinnic R. & Duncan Cr – Chippewa/St. Croix Co.**

**Contact: John Paddock**

#### **Funding Status: Complete**

**Partners: Kiaptuwish Trout Unlimited**

This project is designed to remove overgrowth from 4,800 feet of streambed on these bodies. The Lower Chippewa Basin Trout Crew and volunteers will work on the Kinnickinnic River and Parker Creek as well as Duncan and McCann Creeks during winter months. Mowing, shearing and cutting (with chain saws or heavy equipment) will be done to control woody vegetation. Box elder and spotted alder will be removed from stream banks for a distance of approximately ½ mile each winter. A distance of 45 feet back from the streambank will be brushed whenever possible and practical. Regeneration will be monitored and treated mechanically or chemically to inhibit regrowth and promote further establishment of grassy turf.

<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead

**Jennings Creek – Columbia Co.****Contact: Tim Larson****Funding Status: Complete**

Jennings Creek is a Class II trout stream. Over time, floodwater has cut channels into a nearby drainage ditch, allowing water to drain from the creek into the ditch therefore harming the stream habitat. This project was planned to place dikes at the channel cuts to prevent water from leaving the stream thereby stabilizing the habitat. During the winter of 1999 dikes were built to retain the stream within its channel during normal flow and the drainage ditch banks were sloped from 1:1 to 2:1 to reduce back cutting. Unfortunately in the spring of 2000 the stream overtopped its bank, washing out the newly constructed dikes and recreating the connections between the stream and ditch. During the winter of 2000 a 400' length of stream was relocated away from the drainage ditch. This new stream channel has become stable and solved the problem.

**Black/Buffalo/Trempealeau Rivers – Jackson, Trempealeau, Buffalo Co.****Contact:****Dan Hatleli****Funding Status: Complete**

Maintenance work on the South Fork of the Buffalo River has been completed. It involved repairs necessary as a result of a severe windstorm that was accompanied by heavy rains, which did considerable damage in July 1998.

**La Crosse/Bad Axe Streams – La Crosse, Crawford, Monroe, Vernon Co.****Contact: Mike Leonard****Funding Status: Ongoing**

This project includes generic habitat maintenance activity, which responds to damage caused by flash flooding on several streams in these counties. Streams receiving work included: Timber Coulee, Bohemian Valley, Coon, Hornby, Reads, Richland, Sugar and Mormon Coulee Creeks.

**Waupee Creek/South Branch Oconto River – Marinette Co.****Contact: Russell Heizer****Funding Status: Ongoing****Partners: Trout Unlimited, US Forrest Service**

The focus of this project was the installation of brush bundles to narrow and deepen the stream channels on both Waupee Creek (3,200 feet) and the First South Branch of the Oconto River (3,500 feet). Work was conducted on both project sites the 2000-2001 biennium. In the 2002-2003 biennium, additional brushing and narrowing work is planned for McCaslin Brook, First South Branch of the Oconto River, Waupee Creek and North Fork Thunder River.

**Upper Green Bay Basin – Marinette & Oconto Co.****Contact: Cliff Sebero****Funding Status: Completed****Partners: Trout Unlimited**

Work in the Upper Green Bay Basin consisted of cleaning out half-logs, maintaining stream bank vegetation and riprap on bank covers, and redredging sediment traps. Work activities on instream habitat devices were conducted in the spring, after snowmelt and runoff, and in the fall after completion of the summer habitat construction work. Redredging of sediment basins took place in early fall, before the spawning run and/or during winter to minimize ground disturbance in lowland areas.

**Chaffee Creek /White River – Marquette Co.****Contact: David Bartz**

**Funding Status: Completed** Many trout streams in Marquette County are in need of brushing to remove streamside vegetation and improve trout habitat. The majority of these streams have not been brushed in the last twenty years. A small investment in this management tool will greatly enhance the trout resource. A total of 5,300' was brushed on Chaffee Creek and an additional 537' was brushed along the White River during the past biennium.

**South Fork Main Creek – Rusk Co.****Contact: James Lealos****Funding Status: Ongoing****Partners: Rusk County Wildlife Restoration Assoc.**

During the 2000-2001 biennium, work was completed on a about ½ mile of stream each year repairing or replacing deteriorating boom covers, adding wing deflectors, narrowing the stream and adding boulder retards, as well as some brush removal. Another ½ mile stretch immediately downstream from the previous work will receive similar treatment in 2003.

**St. Croix Basin — Washburn Co.**

**Contact: Larry Damman**

**Funding Status: Complete**

Trout habitat maintenance has been an ongoing activity throughout the St. Croix Basin for the past 19 years. This project area continued that work. It involved stream bank brushing, easement fencing and habitat structure repair. Work was completed in the 200-2001 biennium.

**Scuppernong River – Waukesha Co.**

**Contact: Susan Beyler**

**Funding Status: Ongoing**

Maintenance work began on ¼ mile of the South Branch of the Scuppernong River in late 2000 and continues into 2002. Beaver dams and other obstructions will be removed. In addition, boom covers and riprap will be installed as needed to replace existing habitat structures. Seeding and vegetation restoration is also planned.

**Upper Wisconsin Basin**

**Contact: Peter Segerson**

**Funding Status: Complete**

Over 17 miles of trout stream throughout the Upper Wisconsin Basin have been restored this biennium under this project. Angler opportunity is once again improved by increased carrying capacity of the streams. DNR staff took measures to prevent erosion and also restored overhead bank covers.

**Lower Wolf River Basin – Waushara, Waupaca Co.**

**Contact: Al Niebur**

**Funding Status: Begins 2002**

Trout habitat restoration/development projects in the Lower Wolf River Basin date back the early 1970s. Maintenance of these projects is needed to sustain healthy populations of trout. Work activities include: (1) routine maintenance of overhead bank covers, riprap, and other fish habitat devices; and (2) removal of brush along stream banks.



**Rock and instream logs create trout cover**



## Trout Habitat Development

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$746,741	\$795,776	\$795,776	\$795,766
Actual IWTS Expenditure <sup>6</sup>	\$1,052,329	\$1,000,127	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$1,343,278	\$1,319,288	N/A	N/A

Habitat development projects in this section of the report encompass a wide range of activities intended to improve streams that support trout population. These streams generally have not had projects in the past and thus are not in the maintenance category above.

### **Fordham Creek – Adams Co.**

**Contact: Jason Spaeth**

#### **Funding Status: Ongoing**

Fordham Creek was choked with tag alder. Work performed includes brushing stream bank for the entire 2,362 feet of easement. The brush that was cut was used as brush bundles in the stream. 46 brush bundles totaling 1,196 feet in length were installed, narrowing the width of the channel, washing away unwanted sediments, and exposing favorable spawning substrate for trout. 8 jetted covers were also installed providing overhead cover for trout as well as bank stabilization. Other work done includes the installation of 50 log retards which provides mid-channel cover and forms substrate for invertebrates.

### **Engle Creek – Barron Co.**

**Contact: Richard Cornelius**

#### **Funding Status: Complete**

During this biennium, 1 bank cover, 140ft of brush mat, 1 log revetment and 2 rock wings were installed. This work improved about 400ft of stream.

### **Turtle Creek – Barron Co.**

**Contact: Richard Cornelius**

#### **Funding Status: Ongoing**

The following habitat work was accomplished from July 2000 through June 2001: 4 bank covers, 5 wing deflectors, 2 rock mats, 2 channel blocks, and 1 brush mat were installed. Also streambank brush was removed. Overall, about 0.5 mile of stream was improved.

### **Yellow River – Barron Co.**

**Contact: Richard Cornelius**

#### **Funding Status: Complete**

This project improved habitat in a high quality brook and brown trout stream. During the 2000-2001 biennium, limited stream bank brushing was done as well as installation of 40 feet of riprap, 4-5 log wing deflectors and 2 log wing deflector-brush mat combinations.

### **Iron River Channel Restoration – Bayfield Co.**

**Contact: Scott Toshner**

#### **Funding Status: Ongoing Partners: Bayfield Co., Brule River Sportmans Club and WCCC**

This project involved constructing a series of current deflectors, channel constrictors and boom covers to flush out a large accumulated sand bed load. Results so far are good, with gravel areas now exposed and deep holes scoured out. This work is complete and has been very successful in withstanding large water flow and providing excellent habitat.

### **Schultz Springs, Namekagon River – Bayfield Co.**

**Contact: Frank Pratt**

#### **Funding Status: Ongoing**

**Partners: U.S. Park Service**

This project is meant to restore some semblance of the original, free-flowing conditions of streams that were impounded for a private fish hatchery. The first year involved studying and mapping the specific restoration work to be done. The work in the second year will involve the actual construction consisting of installation of whole tree deflectors and, where needed, rock deflectors, revetments,

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<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead

bank covers and brush bundles. To date, the ponds have been mapped. Fishery surveys revealed a remnant population of self-sustaining wild brook trout using the ponds primarily for spawning/nursery and coldwater refuge. Larger adults are moving to the Namekagon and utilizing the big water habitat on a seasonal basis. Cap Creek's coldwater habitat has been seriously compromised by long-term beaver activity, but a remnant population of wild brook trout is still present in the headwaters. A site plan for habitat restoration, including re-connection of Cap's Creek to its original outlet channel is now in progress. Special regulations (Catch/Release, with artificial lures only) have been proposed and will be voted on at the 2002 Spring Conservation Hearing. Trout Stamp funding and Federal (USPS) funding has been obtained. National Environmental Policy Act (NEPA) approvals and permits will be obtained this winter with actual restoration planned for summer 2002.

**North Fork Clam River– Burnett Co.**  
**Funding Status: Begins in 2003**

**Contact: Byron Lund**

This project will improve trout habitat on a high quality trout stream located in the Clam River Fishery Area on DNR lands. Instream habitat will improve with the addition of three lunkers and two rock structures. Brush will be removed and the area matted.

**Eau Claire Projects – Chippewa/St. Croix Co.**  
**Funding Status: Complete**

**Contact: John Paddock**  
**Partners: Trout Unlimited**

This project supported the removal of woody vegetation on Duncan & Parker Creeks and the Kinnickinnic River by DNR crews and volunteers from Trout Unlimited.

**Duncan Creek – Chippewa Co.**  
**Funding Status: Complete**

**Contact: John Paddock**  
**Partners: Trout Unlimited**

This project consolidated 2,500 feet of Duncan Creek back into the original channel. Riprap was used to stabilize the main channel and lunkers were installed to provide overhead cover. As a result, the increased stream flow provides faster moving and highly oxygenated water that brook trout prefer. This project completes the habitat restoration work needed downstream of Hwy 64.

**Elk Creek – Chippewa Co.**  
**Funding Status: Begins 2000**

**Contact: John Paddock**  
**Partners: Trout Unlimited**

The Elk Creek project was initiated as a cooperative effort on the part of the DNR and the Ojiblean Chapter of Trout Unlimited. It had been originally planned as a two-year project but with the availability of the trout crew and with surplus funds from other projects the entire 2,430 feet was completed in two months. Record rainfall for this period (9 in. over normal) slowed the effort and added expense. 2,110 tons of granite riprap and 1,371 cubic yards of fieldstone were used to complete construction. All disturbed areas were seeded and mulched throughout the stream thread. An inspection of the site following record flooding in September indicated no failures and seeded areas growing well. Surveys show that trout over 12 inches inhabit this stream. This project will significantly increase the number of adult fish in Elk Creek.

**McCann Creek – Chippewa Co.**  
**Funding Status: Complete**

**Contact: Brian Spangler**  
**Partners: Trout Unlimited**

The objective of the McCann Creek restoration project was to begin restoration of headwater spawning areas and create winter pool cover areas for Brook Trout. McCann Creek has experienced a continuous decline in native trout numbers for the past 10 years mainly attributable to high water temperatures from degraded habitat. Past beaver activity and other water obstructions created large areas of shallow stagnant water. Although beaver problems have diminished, the after effects of damming continue to affect stream habitat. Multiple stream channels created by beaver dams were blocked to concentrate stream flow into one channel for sediment transport and improve water temperatures. The placement of 50 overhead lunker structures throughout the habitat area provided needed overhead cover for trout. The stream was narrowed in areas of ground water infusion to expose former suitable spawning sites. Areas with emerging meander cut-offs were riprapped to halt excessive erosion. Approximately 3500 feet of stream channel was stabilized or restored under this project.

**Lodi Spring Creek – Columbia Co.**

**Contact: Tim Larson**

**Funding Status: Begins 2002**

**Partners: Lodi Park Commission/City Council, Lodi Canning Company, Madison Chapter TU**

The lower 4 miles of Lodi Creek, within and downstream of the City of Lodi, are excellent brown trout water, especially known for large trout. It requires stocking, as natural reproduction is typically low. Most of the spawning habitat is located on riffles within the City, however these areas occur where the stream has been straightened and the banks have been lined with vertical, stone walls. In Oct. 2001 volunteers placed rock riprap at the base of the walls offering hiding cover for fingerling trout. Also rock riffles will be created below two 18" high log dams, which create pools for the Town's mascot 'Susie the Duck'. This will allow trout access to upstream spawning habitat. In addition, three educational signs will be placed near the stream.

**Plum Creek – Crawford Co.**

**Contact: Mike Leonard**

**Funding Status: Complete**

**Partners: Prairie Rod & Gun Club**

This project continued work begun in 1998. During this biennium, 1,800 feet of stream length was improved by installing 32 luncker structures, rock wing deflectors, rock weirs, boulder retards, and cross channel logs. In addition, cattle crossings were installed and the banks were stabilized by adding riprap rock, then sloped, seeded and mulched. During the summer of 2001 an additional 2,895 feet of stream was improved which included the installation of 23 luncker structures, cross channel logs, rock wing deflectors, rock weirs, boulder retards along with stream bank riprapping and sloping. The Prairie Rod and Gun Club has generously helped with this project by acquiring grant money, donating club money and constructing luncker structures.



**Prairie Rod & Gun Club donating time and labor to build lunkers**

**Sugar Creek – Crawford Co.**

**Contact: Mike Leonard**

**Funding Status: Complete**

**Partners: Prairie Rod & Gun Club**

The bed of Sugar Creek, in the area addressed by this project, consisted mainly of sand. DNR workers improved the bed by adding in-stream rock and also increasing the amount of cover areas for trout. Previous work on an upper portion of Sugar Creek increased the trout population by more than 1,000%. During the summers of 2000 and 2001 a total of 2,890 feet of stream was improved. Considerable cover for trout was added by narrowing and deepening the stream, installing 51 luncker structures along with numerous cross-channel logs, rock weirs, rock wing deflectors, boulder retards, and other in-stream rock. Again, on this project the Prairie Rod and Gun Club was very helpful with supplemental funding and the building of luncker structures.

**Black Earth Creek – Dane Co.****Contact: Scot Stewart****Funding Status: Complete****Partners: Trout Unlimited and Dane County LCD**

Three thousand feet of Black Earth Creek, on the Danz property, were to be improved under this project. The project was not completed because the landowner would not sign the cost share agreement, which provided 70% of the funding.

**Deer Creek – Dane Co.****Contact: Scot Stewart****Funding Status: Complete****Partners: Trout Unlimited, Dane County Conservation League, Deer Creek Sportman's Club, and Dane County LCD.**

Deer Creek is one of two upstream tributaries of Mt. Vernon Creek that is a Class I trout stream. Improvements made in this biennium involved installing 300 lunkers on outside bends and stabilizing stream banks with riprap to provide cover for trout. Rock was covered with dirt, then seeded and mulched. In total, 21,250 feet of stream was improved. Brook trout are now reproducing well in the stream and multiple year classes are present. This work will help the stream become self-sustaining with good brook trout density and size.

**Harbison Branch – Dane Co.****Contact: Kurt Welke****Funding Status: Begins in 2002**

Harbison Branch experiences natural reproduction of brown trout and is an important source of stable cold water for Token Creek that is currently the site of a considerable ongoing restoration effort. This project consists of the removal of an existing rough fish holding pond (from the contract commercial fishing era) to restore the channel, character, and habitat of the Harbison branch. The holding pond was, in fact, removed in summer of 2001. In 2002, the former pond banks will be brushed and prepared for re-sloping. DNR Staff hope to use the old pond bed as a disposal site for dredge spoils from the Token Cr. restoration project. This fill will be used to correct the meander of the creek within the old pond bed.

**Manley Creek – Dane Co.****Contact: Tim Larson****Funding Status: Ongoing**

This project continued the trout habitat improvement work on 3/8 mile of Manley Creek that was started in June of 1997. Upstream "V" deflectors and bank revetment structures were installed to create more deep-water areas and overhead cover. Also badly eroded stream bank areas were stabilized. In winter 2000, staff brushed 1 mile of the stream work zone and stockpiled materials for 40 lunker structures at the stream bank sites. During summer of 2000 and 2001, WCC crews installed the structures. In 2002, work will continue on an additional 1/2 mile of stream thread: 4,200 feet of stream bank (one bank) will be brushed, tapered and seeded with native grass. 2,300 yd. of rock riprap will be placed for erosion control and to provide fish cover.

**Story Creek – Dane Co.****Contact: Doug Lubke****Funding Status: Complete**

A ditched portion of Story Creek was re-introduced into its original meandered channel in 1999. The limiting factor for good trout growth and survival in this section then became overhead cover. Mini lunker structures have been constructed and placed. This work (completed in December 2001) saw the installation of 350 feet of overhead cover structures, placement of riprap on 1,000' of streambank and 3,200 feet of streambank brushed. Improvement of the habitat in this area will result in increased trout numbers, better recruitment of young trout and better survival of adult trout.

**Token Creek – Dane Co.****Contact: Scot Stewart****Funding Status: Ongoing****Partners: Town of Windsor, Trout Unlimited, Dane County Conservation League, Token Creek Watershed Ass., Dane County LCD, and Dane County Natural Heritage Assn.**

This project will help create seven miles of Class I trout water replacing a shallow millpond with a historic rough fish problem. The superstructure of the Token Creek Millpond Dam was removed in the fall and winter of 1999-2000. Temperature monitoring and fish sampling were completed next.

Soil cores were taken along 14 transects to locate the original stream channel. The project has been accepted as an Army Corps of Engineers 206 project with final stream re-meandering to commence in 2003.

**W. Branch Sugar River – Dane Co.**

**Contact: Scot Stewart**

**Funding Status: Ongoing**

**Partners: Dane County**

This project stabilized eroding stream banks and improved instream cover on 12,000 feet of the West Branch of the Sugar River in Dane County. A total of 5,475 feet of riprap, 285 lunger structures, and 13,835 feet of bank shaping and sloping with rock were completed. In addition 8,715 feet of fence were replaced, 9 floodgates were installed and 10 acres of disturbed ground were re-seeded and mulched. Grants obtained by Dane County provided 70% of the funding for this project.

**Bois Brule River – Douglas Co.**

**Contact: Dennis Pratt**

**Funding Status: Complete**

**Partners: Brule River Sportsmen's Club, Brule River Preservation, Trout Unlimited, Steelhead Association, T.R.O.U.T., Arrowhead Flyfishers, WCC, Inmates at Gordon Correctional Facility, Wisconsin National Guard, Trout and Salmon Foundation & landowners**

The Bois Brule River in Douglas County is one of the more famous trout streams in Wisconsin. The watershed makes up about a quarter of all naturally reproducing anadromous (lake run) tributary trout mileage in the state. In the upper half of the river the quantity and quality of spawning areas available for trout is in short supply and degraded condition. This portion of the stream has extremely high water quality and is one of the most stable flow reaches in the Lake Superior basin. The trout population was impaired by the lack of available spawning habitat. Work activities included site planning, obtaining water regulation permit, work planning, public involvement (club volunteer work weekends), directing Department crews, moving spawning substrate to the river, placing material instream, monitoring salmonid use and adjusting design to improve spawning success. All habitat improvements completed thus far have been well utilized by all the various species and anglers are seeing the fruits of this effort in the fishery.

**Bois Brule River Large Wood Debris – Douglas Co.**

**Contact: Dennis Pratt**

**Funding Status: Complete**

**Partners: Trout and Salmon Foundation, Brule Preservation, Inc. and Brule Sportsmen's Club**

During the logging period in Wisconsin's Lake Superior Basin, rivers including the Brule were used to transport the logs downstream to Lake Superior where they were grouped in rafts and towed to area sawmills. Any trees or logs that would slow this process were cleared from the channel. The resultant cut of the trees along the stream and removal of instream logs destroyed very important habitat for trout. This project added this type of habitat (termed by biologists as large woody cover) back to a portion of the Upper Brule. Varying types of structures were placed in the stream and evaluated as to the success in creating trout habitat. It is expected that the successful techniques and the experience gained will be applied to other portions of the stream by clubs and landowners in the future.

This work, an eight-mile stretch from the DNR ranger station upstream to the area locally known as Cedar Island, is an extension of the very successful DNR work done in the area upstream of this section in the last biennium. Now historical trout cover is in place and the conditions are improved for brook trout reproduction. It involved adding backlog cover intentionally removed by WPA workers in the 30' and 40's. A substantial amount of volunteer labor was used to accomplish the project.

**Pine Creek – Eau Claire, Trempealeau Co.**

**Contact: Dan Hatleli**

**Funding Status: Begins 2002**

Crews will improve habitat on 2.5 linear miles of Pine Creek by removing undesirable tree species. Then, 200 overhead bank structures and 4,500 yards of riprap will be installed. The result will be improvement of habitat, public accessibility, fishability, and reduction of erosion in Pine Creek.





### **Backhoe Placing a Lunker**

**Brule Creek – Forest Co.**  
**Funding Status: Complete**

**Contact: David Brum**  
**Partners: Curran Family**

This project site is an 1,880-foot segment of Brule Creek, Class I brook trout water, adjacent to the Curran property. The project was completed in September 2000. The stream was degraded by past beaver activity and late 1800's logging practices. It was restored by narrowing and deepening the channel. Twenty-five bends (pool areas) and twenty-two riffles were created or enhanced. The mean channel width was narrowed from 28.1 feet to 13.3 feet. The average depth increased from 8.1 inches to 13.6 inches. One hundred and twenty five whole logs and one hundred and thirty boulders were distributed throughout the project site for additional trout cover.

**Brule Creek – Forest Co.**  
**Funding Status: Complete**

**Contact: Dave Brum**  
**Partners: Brule Springs Corp**

The stream channel within this project boundary was wide and shallow with a moderate gradient. This condition is the result of past beaver activity and late 1800's logging practices. Natural reproduction of brook trout is adequate but habitat is limited. It is a 1620-foot segment of stream owned by the Brule Springs Corporation. The landowners signed a Trout Habitat Agreement with the Department. The objective of this project was to restore the natural stream meander, provide cover and improve water quality for all year classes of brook trout. Specifically, the stream segment was restored by narrowing and deepening the channel. Nineteen bends (pool areas) and eighteen riffles were created or enhanced. The mean channel width was narrowed from 31 feet to 13.8 feet. The average depth increased from 7.0 inches to 13.2 inches. One hundred whole logs and one hundred and forty boulders were distributed throughout the project site for additional trout cover. While it was not scheduled to begin until FY 2002, work was completed in June 2001. This activity will benefit the entire cold water fish and invertebrate community.

**Elvoy Creek – Forest Co.**  
**Funding Status: Suspended**

**Contact: David Brum**

The objectives of this project are to enhance/restore the natural stream meander of Elvoy Creek as well as increase the depth and cover for brook and brown trout. They are to build on work done in 1986. A dam has been identified for removal downstream from the initial work area. However the necessary agreements for removal are not yet in place. The project will be resubmitted at a later date.

**North Otter Creek -- Forest County****Contact: David Brum****Funding Status : Complete****Partners: US Forest Service**

This Project was completed in August 2000 with cooperation of the USFS Nicolet National Forest, Eagle River District. The objective of the collective effort was to restore 3900 feet of brook trout habitat that was damaged by past beaver activity. Habitat was restored by creating a more sinuous stream pattern and by narrowing and deepening the channel. The mean channel width was narrowed from 18.3 feet to 9.7 feet. The average depth increased from 6.8 inches to 14.0 inches. All riffles areas were left intact or enhanced. Boulders and whole logs were distributed throughout the project area for additional trout cover.

**Grant/Platte/Pecatonica Basin – Grant, Richland Co.****Contact: Bradd Sims****Funding Status: Ongoing**

This project funds instream habitat improvements in several Southwestern Wisconsin streams including: Steiner, Little Green River, Ash, Castle Rock/Doc Smith and Willow.

**McPherson Branch – Grant Co.****Contact: Bradd Sims****Funding Status: Begins 2003****Partners: Trout Unlimited, UW Platteville**

A public easement has been purchased along all of the trout water within the McPherson Branch. Cooperative efforts between Trout Unlimited, UW Platteville, and the DNR have been established to restore the McPherson to a class I trout fishery. In total, the project will restore a total 1.5 miles of the McPherson Branch. Crews will install instream habitat structures as well as clear banks of brush and seed the cleared areas.

**Trout Streams – Grant, Iowa, and Richland Co.****Contact: Gene Van Dyck**

**Funding Status: Begins 2002** This project funds instream habitat improvements in several Southwestern Wisconsin streams in the Lower Wisconsin River Basin:

- Willow Creek, Richland County – 2.5 miles of intensive stream bank tree and brush removal on DNR easement areas.
- Ash Creek, Richland County – Evaluate an intensive habitat improvement project undertaken on this stream over the last 3 years and take final corrective and finish up actions as needed.
- Mt. Hope Pond/Little Green River, Grant County -- Restore and develop brook trout spawning areas. Recreate the stream including upwelling water area and enhance trout habitat in the historic pond site.
- Sanders Creek, Grant County – Install up to 8 3-unit bank covers and accompanying crosslog deflectors in Sanders Creek in the City of Boscobel with cooperation from the Boscobel High School Biology and Agriculture Classes.
- Mill Creek, Richland County – Initiate a large-scale intensive instream habitat improvement project on this stream starting with a riprap project on the big water at the lower end and proceeding upstream. This work will include maintenance of historic areas that have been riprapped, brushed and cleared of trees in the past. Also, work in new areas will include tree and brush clearing, riprapping, installing bank covers and associated cross log deflectors, channel constrictors, etc.

Control of beaver and the removal of their dams will be done as needed on the trout streams.

**Gordon , Ley , Conley, & Lewis Creeks – Iowa Co.****Contact: Bradd Sims****Funding Status: Begins 2002****Partners: Trout Unlimited, UW Platteville**

These streams have been overrun with nuisance vegetation such as box elder and willow trees. These trees decrease bank stability, reduce primary productivity, and attract unwanted beaver activity. Crews will remove brush and trees from the banks of the listed streams and associated tributaries for a distance of 60 feet landward. The project area on Gordon will cover 1 mile, 0.8 mile on Conley-Lewis, and 0.2 mile on Ley.

**Black/Buffalo/Trempealeau Rivers – Jackson Co.**

**Funding Status: Ongoing**

**Contact: Dan Hatleli**

**Partners: Trout Unlimited**

A fish management crew is conducting this project in the North Fork of the Buffalo River. In addition to removing sedimentation, the project involved installation of jetted structures for trout cover, and riprapping of banks for stabilization. A parking area was also constructed near the site.

**Black/Buffalo/Trempealeau Rivers – Jackson, Trempealeau, Buffalo Co.**

**Contact:**

**Dan Hatleli**

**Funding Status: Begins in 2002**

**Partners: Elk Rod and Gun Club, Trout Unlimited**

This project funds money to buy a Bobcat 331 mini-excavator which will expand habitat development capability into smaller streams and areas of larger streams not accessible to larger equipment throughout the region. Elk Rod and Gun Club is providing funds for this purchase.

**Besadny Fish & Wildlife Area – Kewaunee Co.**

**Contact: Stephen Surendonk**

**Funding Status: Complete**

The Little Scarboro is a tributary of the Kewaunee River. Most of the lower sections are found within the C.D. "Buzz" Besadny Fish and Wildlife Area. Surveys in the early 1970's indicated a strong population of native brook trout in the river. A survey in 1998 indicated only a remnant population of brook trout. The survey further indicated that steelhead and coho salmon smolts dominated the system. This project completes the work done in the last biennium and makes the stream more habitable for brook trout while limiting access of nonnative salmonid adults. A one-mile stretch of the stream was cleared of brush 10-30 feet wide on each side of the bank. A weir was then constructed to prevent passage of returning adult Lake Michigan anadromous trout and salmon while permitting access of smaller fish species. A portion of the stream corridor was selectively harvested to permit additional sunlight penetration and to heal stream bank erosion caused by tipping trees. Further, a twenty-foot section of overhead cover was installed in a degraded stream section.

**La Crosse/Bad Axe Basin – La Crosse, Crawford Monroe, Vernon Co. Contact: Mike Leonard**

**Funding Status: Begins 2002** This project groups restoration work on several streams in the Basin. Past restoration work has aided in creating a fishery that attracts anglers from all parts of the state and continues to grow in national popularity. As angling pressure increases, additional trout stream restoration is needed to meet the increasing demand for quality trout streams. Proposed project streams to receive work are: Burns, Mormon Coulee, Leon, Coon, Plum and Sugar Creeks. During the 2002 fiscal year, work has been completed under this project on Plum and Leon Creeks. Specific information of the work performed on these streams is listed under Plum and Leon Creek in this report.

**Mormon Coulee Creek – La Crosse Co.**

**Contact: Mike Leonard**

**Funding Status: Complete**

**Partners: Trout Unlimited, Shelby Township**

Work has been completed on two areas of Mormon Coulee Creek. A stretch of the upper portion was improved in cooperation with the Coulee Region Chapter of Trout Unlimited. TU acquired funds to perform the stream work along with constructing the lunger structures. In 1998 and 1999 approximately 1,230 feet of stream length was improved with 44 lunger structures installed. In 2000 and 2001 approximately 1,960 feet of stream length was improved with 41 lunger structures installed. Other stream work included: extensive stream bank sloping and riprapping, installing cross channel logs, rock wing deflectors, rock weirs and boulder retards. At the middle portion, in cooperation with the Town of Shelby at Mormon Coulee Park, approximately 980 feet of stream length was improved. Extensive stream bank sloping and riprapping was performed. The stream was narrowed considerably and cover for trout was created by installing 20 lunger structures, rock weirs, rock wing deflectors, boulder retards and cross channel logs.

**Steiner Branch – Lafayette Co.**

**Contact: Bradd Sims**

**Funding Status: Begins 2002**

**Partners: Lafayette Co.**

The Steiner Branch is class II trout water. Successful work and investment in the surrounding watershed has improved the carrying capacity of this stream. This project will restore 1.26 total miles of habitat with the potential for maintaining a self-sustaining brook trout population. Woody



vegetation along 1.25 miles of Ley creek and 1.5 miles of Steiner branch was removed. Grasses have been established, bank stability and overhead cover have increased. The response of existing trout populations to the work completed has been positive. Steiner Branch will be surveyed annually for brook trout reproduction and population status.

**East Branch Eau Claire River – Langlade Co.**

**Contact: Peter Segerson**

**Funding Status: Complete**

This project narrowed and deepened the stream channel of the East Branch of the Eau Claire River. Boom covers were installed on a ¼ mile stretch of stream in 2000.

**Holgot Springs – Langlade Co.**

**Contact: Peter Segerson**

**Funding Status: Complete**

Holgot Springs, a part of the Woods Flowage, was dredged to remove deposits of silt and organic sediments. This allows for increased trout productivity and carrying capacity.



**DNR Crew installing a rock weir**

**Willow Springs — Langlade Co.**

**Contact: Peter Segerson**

**Funding Status: Begins 2002**

Willow Springs has been considered a high quality brook trout fishery offering winter refuge for fish migrating from Willow Creek and the Hunting River. It was impounded by an earthen dam and managed as a private fishing pond. This project will involve work to remove approximately 40,000 cubic yards of silt and organic sediment to increase trout productivity and carrying capacity in Willow Springs. The average depth will be approximately 5.5' in the pond. About 15% of Willow Springs will not be dredged to leave shallow spawning areas. The work on Willow Springs has begun in the fall of 2001 and will continue into the summer of 2002.

**Starks Springs & Woods Flowage Fishery Area – Langlade Co.**

**Contact: Peter Segerson**

**Funding Status: Complete**

This area is a high quality brook trout fishery offering quality substrate spawning areas and wintering refuge for fish migrating from Drew Creek. But the shallow spawning areas had become heavily silted and extensive growths of weeds have choked large areas of the pond. In the past biennium, 35,000 cubic yard of loose sediment was dredged to a maximum of 12' to restore the spawning areas. About 15% of Stark Springs was not dredged to leave shallow water for invertebrate and forage fish populations and also to provide habitat for young brook trout.

**Wolf River Landing – Langlade Co.**

**Funding Status: Complete**

**Contact: Peter Segerson**

**Partners: Wolf River Trout Unlimited**

This project narrowed and deepened the Wolf River between Big & Little Sheen Rapids. Construction was accomplished in 1999 with seeding and planting of aquatic plants was done in 2000.

**Prairie River – Lincoln Co.**

**Funding Status: Complete**

**Contact: Peter Segerson**

**Partners: Trout Unlimited**

Segments of the Prairie River stream channel were narrowed and deepened under this project. Overhead cover was increased by constructing skyhook boom covers and half-logs. A ½ mile stretch of the river was completed in the summer of 2000 that included boom cover and boulder installation as well as deeping the channel.

**Ward Dam – Lincoln Co.**

**Funding Status: Complete**

**Contact: Peter Segerson**

**Partners: Trout Unlimited**

This project monitored the removal of the Ward Dam including erosion and temperature changes. Habitat structures were installed in the spring of 2000.

**Plover River – Marathon Co.**

**Funding Status: Complete**

**Contact: Alan Hauber**

**Partners: Trout Unlimited**

The goal of the work was to narrow and deepen the channel of the Plover River through the use of current deflectors, islands, and overhead covers. 6350 feet of river was improved. This included the installation of 28 current deflectors totaling 5438 feet in length. Streambed materials were used to create the current deflectors which narrowed the stream channel in half. Six islands totaling 1566 feet and averaging 41 feet in width were also created. Three to four hundred boulder retards were also installed in the stream channel to provide mid-channel cover. One set of sky-hook boomcovers equaling 64 feet in length were also installed. Numerous root-wads, and stumps were installed. Future work at the site will include the installation of seventy five half logs. .

**Upper Middle Inlet Creek – Marinette Co.**

**Funding Status: Completed**

**Contact: Cliff Sebero**

**Partner: Trout Unlimited**

Traditionally, trout stream bank covers have been constructed by using oak or pine lumber for the framework. Conventional lumber provides excellent framework for habitat devices, but does wear out over a period of time. This project involved installing two prototype bank covers made of type 2, high-density plastic lumber made from recycled milk jugs. The face boards, stringers and pilings were all built using this type of plastic lumber which is black in color. These bank covers were of “Hedings Design” (see pg. 24 of Guidelines for Management of Trout Stream Habitat in Wisconsin – Technical Bulletin No. 39). Since plastic lumber does not share the same property values as traditional lumber, slight modifications were employed in the Heding design framework. After installation, these structures were back-filled with fieldstone, sodded, seeded and mulched. They have a combined length of approximately 170 feet. Annual shocking surveys and periodic inspections are being conducted each year to monitor the condition of the structures and how well the trout are utilizing these bank covers. To date each bank cover is in excellent condition and they are holding adult trout which has been verified through electro stream shocking. Annual monitoring will continue to determine if these plastic bank covers will withstand the test of time.

**Chaffee Creek – Marquette Co.**

**Funding Status: Begins in 2002**

**Contact: David Bartz**

**Partners: Trout Unlimited**

This work will improve trout habitat by stabilizing banks and placing instream bank covers on 2000 ft of Chaffee Creek. Work will begin as soon permits are approved.

**Mecan River – Marquette Co.**

**Funding Status: Begins in 2003**

**Contact: David Bartz**

This work will reinforce and stabilize a stretch of severely eroding bank on Mecan River.

**Wedde Creek – Marquette Co.**  
**Funding Status: Begins in 2002**

**Contact: David Bartz**

This stream was previously brushed and brush bundles were used to narrow the channel. The next phase, installation of overhead bank covers and bank stabilization, should increase the carrying capacity of the stream. Map and survey work is complete. Rock will be hauled into the work area after the ground has frozen, and lumber and pilings will be cut in the winter of 2001-2002.

**Coles Valley Creek – Monroe Co.**  
**Funding Status: Complete**

**Contact: Mike Leonard**

**Partners: Trout Unlimited, Monroe County**

Work on this project was done in cooperation with the Monroe County Land Conservation Department with Bob Micheel as the project manager. Trout stamp money was used to purchase riprap rock and materials for lunger structures. In 1999 approximately 3,600 feet of stream was improved. In 2000 an additional 6,442 feet of stream was improved. Numerous rock weirs were installed to increase water depth and cover for trout along with more than 1,500 feet of lunger structures (188 lungers). Since Coles Valley Creek is a tributary to Silver Creek, this work will have a very positive impact on the entire Silver Creek system and also a complimentary effect on the Ft. McCoy project discussed next.

**Ft. McCoy Streams – Monroe Co.**  
**Funding Status: Complete**

**Contact: Mike Leonard**

**Partners: Ft. McCoy**

Three streams (Silver Creek, Tarr Creek and the La Crosse River) on Ft. McCoy have been improved by John Noble the Fisheries Biologist at Ft. McCoy. Trout stamp funds have purchased riprap rock, lunger structure materials and paid for rental costs of an excavator to perform stream work. So far, approximately 4,400 feet of stream has been improved including the installation of 108 lunger structures, boulder retards, rock wing deflectors, root wads and brush bundle construction

**Leon Creek – Monroe Co.**  
**Funding Status: Complete**

**Contact: Mike Leonard**

This project started out with the construction of a machinery crossing to allow access to both sides of the stream so workers could remove trees and stockpile riprap rock along the stream banks. In-stream work began during the summer of 2000 and more work was done during part of the summer of 2001. The streambed of this portion of Leon Creek consists mainly of sand. Therefore rock riffles and rock weirs were constructed to stabilize the streambed. Numerous cross channel logs and boulder retards, along with 28 lunger structures have been installed for additional cover. Approximately 2,460 feet of stream length has been improved. The average depth before the improvement work began was less than 2.5 feet deep. One hole created from the stream work is presently more than 9 feet deep. More work is scheduled for the spring of 2002.



**Completed habitat restoration area on Leon Creek. Stream narrowed, cover structures and rock have been installed. Banks have been cleared of brush and seeded.**

**South Branch Oconto River – Oconto Co.**

**Contact: Cliff Sebero**

**Funding Status: Completed**

**Partners: US Forest Service, Menominee Indian Tribe, Trout Unlimited**

A habitat project was implemented on the South Branch Oconto River, between Wisher Lake Road and the USFS Seed Orchard. Beaver dams had decimated the habitat throughout this stretch of stream. Average width had been 42 feet and only several inches deep. During the fall and winter of 1999-2000, boulders were brought in and a sand trap installed on the downstream side of project. Thalweg restoration began in 2000 and the stream was narrowed and deepened. The natural meander of the stream was restored and boulders strategically placed in the stream along with digger logs to create resting pools and overhead cover. During June 2001 a dozen inverted tree stumps were installed and several sets of piling clusters. In all, 2486' of stream channel was improved and deepened by 1½ to 2 feet. The width was decreased from 42 feet to 20-25 feet.

**Cady Creek – Pierce Co.**

**Contact: John Paddock**

**Funding Status: Complete**

DNR Crews restored 2.5 miles of stream under this project. They installed 300 lunkers, stabilized, shaped and seeded the banks. Boulder retards and current deflectors now provide cover, divert flow and provide mid-channel feeding areas. As a result, overhead cover has been increased by 20%, spawning habitat by 40% and carrying capacity by 200%.

**Lower Chippewa Basin – Pierce, Dunn, Eau Claire Co.**

**Contact: John Paddock**

**Funding Status: Begins 2002**

**Partners: Trout Unlimited**

This project will involve trout habitat construction on 1,700 feet of Cady Creek, 3,800 feet on Elk Creek, and 1,100 feet on the Kinnickinnic River. It is part of a continuing effort that will complete restoration of formerly highly degraded streams. The effort will restore fishable populations of native brook trout and create additional quality fishing experiences.

Cady Creek: Approximately 1700 feet of eroded braided streambanks will be stabilized sloped, seeded and mulched. Excessive braiding will be eliminated for concentrated flow to move sediment and expose gravel substrate. This will increase spawning areas for trout and aid in survival. Instream boulder current deflectors, log cover and 40 wooden plank cover structures will increase overhead cover by 30 %. Pool areas will be increased by 25% to increase over winter survival of brook trout. Excessive erosion will be eliminated and sediment load decreased. Post restoration surveys will determine the positive impact of restoration efforts on native trout populations. Periodic monitoring will ensure restoration efforts are successful.

The Elk Creek Project entails the restoration of 2,100 feet of highly degraded stream and the enhancement of trout habitat on DNR Fisheries property. Various habitat improvement structures will be installed such as root wads, log revetments and 65 jetted overhead boom covers. Pools and overhead cover will be increased substantially with additional midstream woody cover for feeding areas. Narrower channels and increased current velocity should expose gravel substrate for spawning fish and help flush excess sediment through the system. Trout populations should increase substantially with improved habitat conditions.

The Kinnickinnic River at the site of this work has been straightened and moved to flow parallel to a roadway for a distance of 690 feet. A considerable amount of erosive energy was expended on a 1,100 foot meandered section of state property immediately downstream, creating excessive streambank instability. Active erosion is progressing rapidly into a wooded section causing numerous trees to topple into the stream accelerating bank instability. Extensive braiding in downstream sections has developed due to the heavy sediment load from eroding areas. To rectify this action, channel blocking woody debris will be removed to halt impounding effects and consequent channel migration. 30 jetted trout habitat structures and strategically placed woody cover will provide



additional overhead cover for trout. Large-scale meander cut off channels will be closed off to accelerate straightening effects. Bank erosion will be minimized and overall trout habitat will be greatly improved.

**Rush River – Pierce, Co.**

**Contact: John Sours**

**Funding Status: Complete**

**Partners: Eau Galle River Sports Club, Eau Galle Rush River Sports Club**

The Lower Chippewa Basin and that part of the St. Croix Basins are currently experiencing rapid economic and urban growth due to the expanding Minneapolis/St. Paul metropolitan area, as well as the cities of Eau Claire, Menomonie, River Falls and Hudson. Coldwater resources in St. Croix and Pierce Counties are experiencing fishing pressure that is at saturation levels on nearly all of the quality coldwater recreational resources in the area. Because of heavy fishing pressure and overcrowding on the good stretches of the Rush, Kinnickinnic and Willow River, anglers are increasing their efforts on poorer sections or neighboring streams such as the Trimbelle, Cady, Plum, Isabelle and Eau Galle rivers.

Many of these streams or stretches have degraded habitat, insufficient natural reproduction and /or are supported by supplemental stocking. However, habitat is the primary limiting factor controlling trout population levels. Stocking large holdover trout to meet the needs of the fishing public in degraded waters is not a large-scale option and does not address the root of the problem -- poor habitat.

Upon completion of this project 1,980 ft. of brook, brown and rainbow trout habitat have been restored. Restoration efforts increased overhead cover, midchannel cover and feeding sites by 20-35% of the stream length. Severe bank erosion was eliminated and fine substrates in the streambed will be reduced by 50%. Pool and riffle areas were enhanced. Brook, brown and rainbow trout populations are anticipated to increase tremendously both in density and size structure. Quality sport fisheries will develop where they were once limited. Improvements are expected in water quality and aquatic macroinvertebrate populations. Public support will continue to increase as will demand for more projects.



**Rock and Backfill are Placed Over and Behind Newly Installed Lunkers.**

**Trimbelle River – Pierce, Co.****Contact: John Sours****Funding Status: Complete****Partners: Trimbelle Rod & Gun Club**

The impact of increased fishing pressure in the Trimbelle River is described in the paragraph above. With completion of the Trimbelle project, approximately 1,080 ft. of brown trout habitat has been restored. Restoration efforts are expected to increase overhead cover, mid-channel cover and feeding sites by 20 -35% of the stream length. Severe bank erosion has been eliminated and fine substrates in the streambed was reduced by 50%. Pool and riffle areas were enhanced. Brown trout populations are anticipated to increase tremendously both in density and size structure. Quality sport fisheries will develop where they were once limited. Improvements are expected in water quality and aquatic macroinvertebrate populations. Public support will continue to increase as will demand for more projects.

**Clam River – Polk Co.****Contact: Richard Cornelius****Funding Status: Complete**

During 2000-2001, limited stream bank brushing was done. In addition, one bank cover and one large brush mat were repaired. Finally, one new rock wing deflector was constructed.

**Central Wisconsin River Basin – Portage, Marathon, Juneau Co****Contact: Jason Spaeth****Funding Status: Begins 2002****Partners: Trout Unlimited, Marathon Co.**

The Wisconsin Rapids Trout Habitat Improvement Crew will perform 13,000 feet of trout habitat improvement work in year 1 of the biennium. Work will be done on the Plover River in Marathon County, as well as the Flume Creek in Portage County, Fountain Creek in Juneau County. Habitat analysis before and after the work is done using stream electrofishing gear will document changes in the trout populations and biomass. A control station will be created to better show the effect of the trout habitat improvement.

**Waupaca/Tomorrow River – Portage, Waupaca Co.****Contact: Al Niebur****Funding Status: Ongoing****Partners: Trout Unlimited, private landowners, County Land Commissions**

The Waupaca/Tomorrow River is one of the more popular trout fisheries in Central Wisconsin. It is a large Class I and II trout stream that flows through parts of Portage and Waupaca counties. The fishery consists primarily of brown trout, however, brook trout (especially in the headwaters and tributaries) and rainbow trout are present. In 1998, the Central Wisconsin Regional Committee of Trout Unlimited chose the Waupaca/Tomorrow River watershed as a focus for their conservation efforts. One of their main objectives was to obtain stream bank conservation easements along the riparian corridor. These easements would protect the stream from development, provide access for anglers, and allow for restoration of degraded trout habitat.

Early in 1999, three contiguous Trout Unlimited easements were obtained on the Waupaca/Tomorrow River. Due to a history of cattle pasturing and logging, the stream channel within this particular easement was extremely wide and shallow with very little cover for trout. Electrofishing surveys indicated a below average trout population with some natural reproduction. The stream was mapped and a habitat plan was developed to improve habitat complexity by increasing channel depth and overhead cover. Instream habitat restoration techniques were developed.

Approximately 4,000 feet of habitat restoration work was completed by the end of 1999. Techniques included the construction of seven large skyhook boom covers and lunkers (800 feet), wing deflectors, riffles, braided channel (islands), over-wintering pools and placement of several hundred mid-channel boulders, rootwads, and half-logs. In addition, livestock exclusion fences were constructed where needed. Trout Unlimited held six different weekend workdays to construct livestock exclusion fence, install half logs, and build habitat structures.

**Kinnickinnic River – St. Croix, Co.****Funding Status: Complete****Contact: John Sours****Partners: Trout Unlimited**

The Kinnickinnic River is an outstanding Class I brown trout stream in St. Croix County. Many segments of the Kinnickinnic are over grown with brush and habitat quality is declining. Over the last several years, the Kia-TU-Wish Chapter of Trout Unlimited has assisted Department staff with brush removal and restoration efforts. Many areas have been restored by brushing alone, however several areas required additional instream habitat work. From September 2000 to June 2001, habitat improvement work was done on the Kinnickinnic River to restore 1,680 feet of stream at two sites as well as the construction of a low-water block. Approximately 30 boom covers, 100 boulder retards and 24 root wads or whole tree covers were installed. About 1,500 yards of riprap was placed and 1,020 feet of bank tapered, seeded and mulched.

**Dell Creek – Sauk Co.****Funding Status: Begins in 2003****Contact: Tim Larson**

Dell Creek is a good Class II brown trout stream (10.5 mi.) near the Wisconsin Dells. Most of the stream corridor is owned by DNR, with a good portion of the banks heavily wooded or lined with dense brush. Under this project crews will selective remove vegetation along 12.8 miles of streambank (50' corridor, one side) on frozen ground using a backhoe with a brush hog cutter head. Brush will be spread out and decay within the 50' corridor. The purpose is to convert heavy growth tag alder vegetated-stream banks to a grass line stream corridor, which provided more stable banks and the overhanging grass provides hiding cover.

**S. Branch Embarrass River – Shawno Co.****Funding Status: Ongoing****Contact: Ross Langhurst****Partners: ShawPaca Trout Unlimited**

During the summer of 1999, approximately 1,300 feet of stream of the South Branch of the Embarrass River was narrowed, deepened and the natural meander was reestablished. Boulders, wing deflectors and about 300 feet of skyhook boom covers were place throughout the stream sections. In the fall/winter of 1999/2000, an excavator was use to construct current deflectors, install boom covers, place boulder retards and natural log tangles as well as narrow & deepen the main channel. Work will continue in 2003 when 1,500 feet of stream will be narrowed and deepened. Meanders and deep pool will be added as well as cover in the form of boulders and logs.

**West Branch Red River – Shawno Co.****Funding Status: Begins 2002****Contact: Ross Langhurst**

A 1,200-foot section of this stream is in dire need of repair. I t is wide, shallow, sand substrate, and has no cover. Crews must narrow and deepen the channel, add meanders, create deeper pools, and expose gravel. DNR biologists hope to triple the brook trout population within five years after restoration.

**West Branch Shioc River – Shawno Co.****Funding Status: Complete****Contact: Ross Langhurst****Partners: Trout Unlimited, Bonduel High School**

The headwaters of West Branch of the Shioc River are located at the north end of the Village of Bonduel. The entire stream in Bonduel is a Class I brook trout stream, the only one in a 20-mile radius. The history of the West Branch of the Shioc is one of gross abuse and misuse. Most of the stream flowing through private lands has been ditched and straightened and the steam has been subjected to a great deal of pollution. By improving water quality, the remaining brook trout population can be preserved and trout water actually expanded for several miles downstream. This project involved monitoring and studying the stream which included: surveys of water quality, instream habitat surveys using Department accepted procedures and standards, index of biotic integrity, response of native brook trout population, and the response of the local community to our efforts.

**Onion River – Sheboygan Co.**

**Funding Status: Ongoing**

**Contact: John Nelson**

**Partners: Trout Unlimited**

Lunker structures were placed in 584 feet of the Onion and rock had been placed in a previously pastured area under this project prior to 2000. During the 2000-01 biennium, one earthen dam and one concrete dam were removed on an unnamed tributary in the headwaters of the Onion River. 1,600' of stream channel was restored to its original form following dam removal. Trout were given access to over ½ mile of prime spawning habitat that had been isolated since around 1960.



**Restored stream channel at site of former earthen dam. Onion River Stream Bank Protection Area – Sheboygan County June 2001. (Former 4 acre impoundment in background)**

Progress was also made in relocating a 1,000' reach of the Onion River to stop a significant source of non-point pollution from a barnyard. 1,200' of new channel was excavated and is awaiting the placement of rock structures. The Lakeshore Chapter of Trout Unlimited is assisting with funds and manpower. The new channel will be connected to the stream in June 2002 when banks have become stabilized with vegetation. The old channel was located within 50' of a large dairy operation barnyard that served as a significant pollution source. A wetland filter area will be constructed to intercept runoff in the future.



**Former Silver Spring Trout Farm – Sheboygan Co.**

**Contact: John Nelson**

**Funding Status: Begins 2002**

The Silver Springs property was a trout hatchery consisting of a hatchery building, numerous concrete and earthen raceways and over 14 ponds. Water flow from the property formed the main headwaters of Mill Creek. This project will restore free flow to over ½ mile of Mill Creek by dismantling 14 ponds, removing 16 control structures, removing approximately 10 hatchery raceways and diverting flow from several artesian wells. Work on this project will begin in November or December of 2001. Initial work will include the draining of remaining ponds and removal of concrete structures. Grading and stream construction will begin in May 2002 and continue through the summer of 2002.



**Former Silver Springs trout hatchery ponds.  
Constructed stream channel will flow from left-center to lower right corner.**

**Coon Creek – Vernon Co.**

**Contact: Mike Leonard**

**Funding Status: Ongoing**

**Partners: DOT, Villages of Coon Valley and Chaseburg**

Three separate areas on Coon Creek have received stream work. In Coon Valley a cooperative project with the Village of Coon Valley and the Department of Transportation has expanded the accessible fishing trail which included the construction of two bridges over Coon Creek. This allows physically challenged anglers complete access to both sides of the stream. Additional stream work included the installation of 8 lunger structures, boulder retards, a rock weir along with stream bank sloping and riprapping. Down stream about 7 miles a cooperative project with the Village of Chaseburg improved approximately 1,000 feet of stream. Work included stream bank sloping and riprapping, installing 2 rock weirs, boulder retards and 38 lunger structures. In the middle portion of Coon Creek between Coon Valley and Chaseburg the stream banks are extremely high and eroded. A cattle watering area and a cattle/machinery crossing were constructed. Riprap rock is stockpiled along with 20 lunger structures that were built in cooperation with the Coon Valley Conservation Club. Stream bank sloping and riprapping along with in-stream work is scheduled for the summer of 2002.

**Hasley Creek – Vernon Co.**

**Contact: Mike Leonard**

**Funding Status: Complete**

Hasley Creek is a feeder stream that enters Coon Creek just above Chaseburg. Three lunger structures and a Hewitt ramp were incorporated into the construction of a machinery crossing. The crossing will provide additional access for the landowner along with access to stockpile riprap rock for future stream work. Approximately 85 feet of stream length and 500 feet of access road were improved.

**West Fork Kickapoo River – Vernon Co.****Contact: Mike Leonard****Funding Status: Complete****Partners: West Fork Sportsmen's Club, Trout Unlimited, Federation of Fly Fishers, DRIFT Fly Tiers, Forest City Gear and Wahl Clipper**

The importance of the trout fishery on the West Fork of the Kickapoo River cannot be over emphasized. This fishery attracts anglers nationally along with many anglers from within our state. This project is a continuation of previous work in cooperation with the West Fork Sportsmen's Club being the main partner. Two areas received work during this biennium that improved approximately 1,590 feet of stream length. The work included the installation of 9 lunger structures, rock weirs, rock wing deflectors, boulder retards, stream bank cover logs and stream bank digger logs. Extensive stream bank sloping and riprapping was also necessary. Additional stream work that was performed separately by the partners is not included in this report.

**Bluff Creek – Walworth Co.****Contact: Doug Welch****Funding Status: Ongoing****Partners: Southeastern Wisconsin Chapter of Trout Unlimited**

During the 2000-2001 biennium, 770 tons of rock were hauled and placed into Bluff Creek. 51 lunger structures were built and installed along 408 feet of stream. So far during the 2002-2003 biennium 1,000 feet of stream were mapped, staked, and brushed. In addition, 187 tons of 3-foot limestone boulders were placed in the stream, 41 lunger structures were built, and 110 feet of brush bundles were replaced with 195 tons of rock. One culvert was replaced, a new culvert was installed, a new driveway built, and a gravel parking lot was resurfaced. Additional plans for the 2002-2003 biennium include brushing, installation of 41 lunger structures, placement of rock and topsoil, and seeding and mulching. There is continuing evidence of increasing size in the brown trout population as a direct result of this work.

**South Fork of Bean Brook – Washburn Co.****Contact: Larry Damman****Funding Status: Complete**

This project restored a reproduction area degraded by beaver activity. Instream structures, several wing deflectors, brush bundles, one large boom cover were installed. After the beavers were removed, biologists conducted a population estimate and determined there were approximately 967 young-of-the-year brook trout per acre. This being the case, plans to enhance the spawning area were discarded as unnecessary.

**Scuppernong River – Waukesha Co.****Contact: Susan Beyler****Funding Status: Begins in 2002**

A dam and earthen berm impounded this stream until it was removed 8 years ago. It is wide and silted, with poorly defined banks. The flow is slow and shallow. Beaver dams are also a problem on this stream. The proposed project will narrow the bed, remove beaver dams and install brush bundles on 500 feet of trout stream each year.

**Little Wolf River – Waupaca Co.****Contact: Al Niebur****Funding Status: Ongoing**

The Little Wolf River is a Class I and II trout stream in northern Waupaca County. It is fairly unique since it is one of the largest trout rivers in the area and its trout population consists primarily of native brook trout. Many reaches in this river have extremely wide and shallow channels that offer very little habitat for trout. This project proposes to enhance channel depth and complexity by construction of large boulder wing deflectors, lateral scour pools, and placement of mid-channel boulders, trees, root-wads, and half logs on approximately 2,000 feet of river channel. One of the major objectives is to improve over-wintering habitat for larger brook trout. This project is ongoing and the bulk of habitat work will be completed during spring of 2002.

**South Branch Little Wolf River – Waupaca Co.****Contact: Al Niebur****Funding Status: Complete****Partners: Boy Scouts, Trout Unlimited, Conservation Club**

The South Branch Little Wolf River is a Class II trout stream in the Wolf River watershed. Most of this river is considered a seasonal trout fishery with trout inhabiting the better habitat during the cooler months of fall, winter, and spring. It serves as an important over-wintering area for large adult

brown trout that reside in Trout/Nace Creek and Peterson Creek. Some reaches of this river have severely degraded stream channels that are extremely wide and shallow and provide little to no cover for adult trout. This project increased channel depth and habitat complexity by: 1) creating deeper lateral scour pools and wing deflectors, 2) installing overhead bank covers, and 3) placing mid-channel boulders, root-wads, and half logs. Work on this project was done in 2000 in cooperation with several groups (Boy Scouts, Trout Unlimited, Conservation Club, and others) from the Iola area. The community has a strong interest in seeing this project completed and several volunteer workdays were held.

**Witcomb River – Waupaca Co.**

**Contact: Al Niebur**

**Funding Status: Complete**

**Partners: Trout Unlimited**

Whitcomb Creek is a Class I brook trout stream located in the Little Wolf River Watershed. This project assisted Trout Unlimited with a habitat restoration project on a reach of stream severely degraded by beavers. Thus far, Trout Unlimited volunteers have constructed 4 overhead bank covers, several brush bundle wings, and have brushed several hundred feet of stream channel.

**Little Pine Creek – Waushara Co.**

**Contact: Al Niebur**

**Funding Status: Complete**

**Partners: Trout Unlimited**

The Little Pine Creek, a Class I trout stream, is a major tributary to the Mecan River. This project involved trout habitat enhancement activities on several hundred feet of stream. Trout Unlimited has held several volunteer workdays to construct brush bundles and two jetted overhead bank covers.

**Pine River – Waushara Co.**

**Contact: Al Niebur**

**Funding Status: Complete**

The Pine River is a Class I brown trout stream. Trout habitat in lower reaches of the Pine River has been degraded over time due to a combination of beaver activity and loss of bank stability from tipped over trees. Large amounts of sediment have filled in valuable habitat and the stream channel is now very wide and shallow. During the summer of 2000 the following activities were accomplished under this project:

- Improved bank stability and later scour pool habitat by riprapping select outside bends with large boulders
- Constructed one large sediment traps to capture excessive sediment deposits that have filled in existing habitat
- Redirected woody debris obstructions that impair good channel scour
- Installed mid-channel boulders
- Cut large mature leaning trees on the edge of the stream bank to curb channel widening

Work was done in the summer of 2000 on approximately 4,000 feet of stream.

**Upper Pine River – Waushara Co.**

**Contact: Al Niebur**

**Funding Status: Begins 2002**

**Partners: Trout Unlimited**

This project will restore habitat in a 3,000 feet degraded reach of stream that suffers from past beaver activity and an old road grade that currently acts as a low head dam. The Upper Pine River has been the focus of efforts to restore native brook trout population. The stream has been surveyed to identify unique or limiting factors for trout habitat restoration. Electrofishing has been done to document trout populations.

**West Branch White River – Waushara Co.**

**Contact: Al Niebur**

**Funding Status: Complete**

The West Branch White River is a major trout-spawning tributary in the White River Basin. This stream supports naturally reproducing populations of brown, rainbow and brook trout. It is perhaps the largest self-sustaining rainbow trout fishery in Central Wisconsin. This project impacted approximately 2,000 feet of stream through the construction of overhead bank covers and placement of mid-channel boulders.

## Trout Habitat Equipment Purchases

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Year	FY00	FY01	FY02	FY03
Budgeted IWTS Expenditure <sup>5</sup>	\$0	\$0	\$0	\$0
Actual IWTS Expenditure <sup>6</sup>	\$5,997	\$7,486	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$6,874	\$7,486	N/A	N/A

Projects in this area provide funds to maintain existing DNR specialized equipment and, where necessary, lease or purchase new equipment for trout habitat improvement. This equipment is assigned to DNR activities on a regional basis, but can be used on projects throughout the state. Types of specialized equipment purchased during this biennium are: PUG all-terrain vehicles for hauling rock to stream development projects, boats for stream shocking, Bobcat loaders, small excavators, a cutter head unit for a backhoe for brushing work and a 6-wheel "Gator" all-terrain vehicle. Though no funds were planned to be spent in FY00 & 01, funds were disbursed for equipment authorized in previous years.



**Specialized Equipment Places Midstream Boulders**

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<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead



## Beaver Control

Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$169,200	\$169,200	\$128,552	\$131,087
Actual IWTS Expenditure <sup>6</sup>	\$67,593	\$178,386	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$80,004	\$178,614	N/A	N/A

Beaver control work is needed to manage ecosystems in favor of trout in the absence of large predators and because of past forestry practices. It is imperative that beaver control activities be continued and maintained for it only takes a few years for the beaver to become re-established. The absence of the beaver dams will maintain streams in a free flowing and productive condition.

**Upper Chippewa Basin – Ashland, Bayfield, Price Sawyer Co.**  
**Funding Status: Ongoing**

**Contact: Skip Sommerfeldt**

Beaver and beaver dams continue to be the number 1 problem on trout streams in northern Wisconsin. The adverse effects of beaver/beaver dams are well documented and include blocked fish migration and the silting in/sedimentation of spawning areas. This project will control, abate, and minimize beaver damage to important aquatic and riparian habitats in the UC Basin and the Chequamegon National Forest. (This project concentrates more on the class II and III streams, as well as some cool water streams). DNR staff use this project to target problem areas and maintain many of the more important spawning tributaries in a free-flowing state (especially in fall when the spawning run begins). In 2001, this project provided beaver and beaver dam control on 55 miles of trout water in Ashland, Bayfield, Price, and Sawyer Counties. The supplemental work occurred on such streams as Foulds Creek, Elk River, Newman Creek, Long Lake Branch, Spring Brook, Marengo River, Venison Creek, 18-mile Creek, McCarthy Creek, and many of their tributaries. At least 97 beavers were removed from these streams, as well as 110 beaver dams (97 by hand, 13 by explosives). Fall aerial reconnaissance flights were also included as part of the project. The US Forest Service was enlisted to provide most of this beaver control work. Much of the same work is planned for 2002, although the number of miles of trout stream worked on may be lower due to reduced funding in the second year of the biennium.



**DNR Fisheries Biologist Skip Sommerfeldt stand in front of an 8 foot beaver dam scheduled for removal on Frames Creek in Ashland County**

<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead

**Lake Superior & St. Croix Basin – Bayfield Co.**

**Contact: Scott Toshner**

**Funding Status: Complete**

**Partners: APHIS**

DNR Staff worked with the Animal and Plant Health Inspection Service (APHIS) beaver trappers to do reconnaissance work on problem streams in order to direct their trapping effort.

**Lower Chippewa Basin – Chippewa Co.**

**Contact: Joe Kurz**

**Funding Status: Complete**

A fall, aerial survey was completed to identify the number and distribution of beaver dams in six watersheds containing trout water. Maps of the streams, including the beaver dams, were developed for distribution to local trappers and for targeting control efforts of an APHIS trapper. A cooperative service field agreement was developed between APHIS and the lower Chippewa River basin for one-month of beaver removal efforts. An APHIS trapper conducted beaver removal efforts along approximately 53 miles of stream in six watersheds from April to June 2001. In this time, the trapper removed 21 beaver and 25 beaver dams from these streams. In addition, he sought and obtained written permission from landowners for beaver removal that will be invaluable for future removal efforts.

**Lower Wisconsin Basin – Columbia, Sauk Co.**

**Contact: Tim Larson**

**Funding Status: Ongoing**

Beaver damage to trout streams in the Columbia and Sauk Co. portion of the Lower Wisconsin Basin is a continual problem that degrades the trout resource faster than the department can improve it. Approximately 105 miles on 27 trout streams in this area are impacted. Project activity includes: contract beaver trapping as needed (typically 25-50 beaver are trapped annually), remove dams both manually and with explosives, and monitor streams to locate dams (fall flight, angler and hunter contacts).

**Lower Chippewa Basin -- Dunn, Chippewa, Eau Claire, St. Croix Co.**

**Contact:**

**John Paddock**

**Funding Status: Begins 2002**

This project will control beaver by use of a contract trapper in Lower Chippewa Basin. The work will consist of one month of trapping at locations identified by surveillance flights.

**Headwaters Basin — Forest, Langlade, Lincoln, Co.**

**Contact: Peter Segerson**

**Funding Status: Begins 2003**

This project will fund specific beaver and beaver dam removals in the Upper Wisconsin Headwaters Basin. It will include spring and fall aerial flights over target streams to monitor the control effort by looking for and mapping beaver dams. It should be noted that due to reduced revenues from trout stamp funding, this project was not funded for 2002. The Headwaters Basin is trying to get the work done through other funding sources, but the effort has been scaled back due to the lower funding.

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This is a list of beaver dams and beaver removed by county on 68 trout streams in the northeastern part of the state by the USDA-AHPIS Program for the year 2000 & 2001. Twenty additional streams were inspected and/or trapped but did not produce any beaver or dam removal.

**2000**

<b><u>County</u></b>	<b><u>Dams Removed</u></b>	<b><u>Beaver Removed</u></b>
Florence	89	19
Forest	231	105
Langlade	47	16
Lincoln	69	89
Oconto	1	10
Oneida	11	65
Vilas	51	59

**2001**

<b><u>County</u></b>	<b><u>Dams Removed</u></b>	<b><u>Beaver Removed</u></b>
Florence	41	19
Forest	122	114
Langlade	19	21
Lincoln	30	35
Oconto	20	7
Oneida	24	29
Vilas	18	32

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**Upper Wisconsin Basin – Langlade, Lincoln Co.**

**Contact: Peter Segerson**

**Funding Status: Complete**

In 2001, 23 beaver were trapped, 49 active dams were removed and 17 inactive dams were removed. A spring aerial census flight was made to identify problem areas.

**Central Wisconsin – Portage, Marathon, Adams Co**

**Contact: Jason Spaeth**

**Funding Status: Ongoing**

The following work was done in Portage Co. in FY 2000: Bradley Creek, four dams removed and four beaver removed; North Branch of Ten Mile Creek, one dam removed and three beaver removed; Tomorrow River, two dams removed and two beaver removed. Local trappers were also contacted and notified where beavers were known to be present on other streams. Private trappers are encouraged to conduct beaver control where possible to reduce the extent of DNR trapping. However, DNR staff removes beaver dams from area streams as needed when trappers in the area are not interested due to lower fur prices. The project also involves ground surveys to search for problem sites.

**Upper Green Bay Basin – Marinette, Oconto Co.**

**Contact: Cliff Sebero**

**Funding Status: Ongoing**

**Partners: US Forest Service, Florence Co. Forestry Dept., Marinette Co. Forestry Dept., Lake Superior Land Comp., International Paper Co., & Trout Unlimited**

The objectives of this project are to reduce and control the beaver population on selected trout streams. Results of the beaver control program have been positive with trout populations now being

present in portions of the selected streams where little or no trout have existed for the last 20 years. In view of these favorable results, additional streams have been included in FY 01-03. In total there are presently 307.4 miles of trout stream under beaver control measures in Marinette and Oconto counties, not including unlisted tributaries. Since the beginning of this Trout Stamp funded project (1993), there have been 592 beaver dams and 514 beaver {documented} removed from these streams.

**Upper Fox River – Marquette Co.**

**Contact: David Bartz**

**Funding Status: Completed** These funds supported a program to monitor streams in order to locate active beaver populations and dams. All proposed streams were inspected. No beaver were trapped, and no dams were removed.

**West Upper Fox Basin – Marquette, Green Lake Co.**

**Contact: David Bartz**

**Funding Status: Begins in 2002**

This work will remove beaver and dams in a two county area. So far, 3 dams have been removed in Sec 11, T17N-R9E on Chaffee Creek. No new beaver activity has been documented. Work continues.

**Wolf River Basin – Shawno, Oconto Co.**

**Contact: Ross Langhurst**

**Funding Status: Ongoing**

Funds are used to contract out beaver removal projects throughout the basin.

**Statewide Operations**

**Contact: Larry Claggett**

**Funding Status: Ongoing**

**Partners: APHIS**

This project is designed to manage beaver populations at low levels in specific high-priority trout stream watersheds where they are damaging habitat. It responds to input from external partners and uses watershed scale planning. The work includes reviewing the annual cooperative agreement with Animal and Plant Health Inspection Service (APHIS), monitoring APHIS expenses and accomplishments, meeting with APHIS and fish managers as necessary to review the program and set goals, and providing general information on the program. Funds are also available to pay APHIS trappers to control beavers and remove dams in target watersheds.



# Research Studies and Surveys

## Trout Genetics Evaluation/Study

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$5,589	\$9,595	\$0	\$0
Actual IWTS Expenditure <sup>6</sup>	\$15,070	\$24,193	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$19,478	\$24,266	N/A	N/A

### **Namekagon River – Bayfield Co.**

**Contact: Frank Pratt**

#### **Funding Status: Completed**

This pilot project is complete and demonstrated real promise in terms of revolutionizing genetic management in our propagation program. The hypothesis was that propagated wild trout have much better survival rates than domestic strains. This project aimed to prove the hypothesis and fine-tune wild propagation technology.

#### **Methods used in the evaluation include:**

- Creel census and summer electrofishing
- Experiments with new means for locating, capturing, holding, and transporting wild brood fish or their fertilized eggs
- Study genetics of tributary stocks of wild brook and rainbow trout
- Study movements of suspected migratory brook trout stock
- Raise 10-20,000 wild spring yoy for restocking in natal habitat, April 1999.
- Evaluate survival in August 1999 and 2000 and make follow-up recommendations on use of this strategy versus stocking wild yearlings.

#### **Activities:**

- Transferred fish to Phipps Reach in 1999 worked exceptionally well
- Captured brook trout at the weir on the outlet of Stress Springs (2000)

Electrofishing in the Mosquito Brook spawning/nursery areas in 2000 and 2001 showed two very strong year classes of wild brown trout. Angler diaries from 2000-2001 show marked improvement of the adult trout fishery in the Phipps Reach. It appears as if intra-stream, inter-reach, field transfer of wild brown trout, coupled with no kill restrictions have initiated a wild stock recovery in the Phipps reach. DNR Staff will continue to monitor developments. Natural reproduction and adult stock densities in the reach are now high enough that additional field transfer is not needed, at this time.

### **Peshtigo, Lily, Hunting, E & W Branch Eau Claire Rivers – Forest, Langlade Co.**

#### **Contact:**

**Peter Segerson**

#### **Funding Status: Complete**

Stations were sampled on the Lily, Hunting, and Peshtigo Rivers. Wild strain stocking was not successful on the Lily River and will be ended. Wild strain stocking on the Hunting River has been more successful than stocking domestic rainbow and brown trout. Domestic strain stocking will end on the Hunting River. A management report was completed for the first 3 years of evaluating wild strain stocking on the Hunting River. There were 7 stations sampled on the West Branch Eau Claire River. Wild strain brook trout stocking has shown some success. 2000 was the third consecutive year of feral brown trout stocking assessments (five single run stations) on the Peshtigo River. Generally

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<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead

speaking summer survival and growth of stocked fingerlings assessed the same year they were stocked was very good. The 1999 evaluation showed good over winter survival of these fish as yearlings and but only fair results in 2000. The 2000 electrofishing evaluation was the first year that an adult year class (2+) would be present in the system. These are brown trout from the 1998 spring fingerling stocking, fish that showed highly favorable results as fingerlings and yearlings in prior evaluations. Carry over success of the adult fish proved to be less than favorable in 2000. A stocking evaluation report was completed for all three years on the Peshtigo River. Brule River - Forest County, three stations were evaluated to gather some background data prior to any possible feral brown trout stocking.



**DNR Crews Conducting Electrofishing Survey on Plum Creek**

## Coldwater Habitat Evaluation

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$61,130	\$36,023	\$58,840	\$59,140
Actual IWTS Expenditure <sup>6</sup>	\$50,053	\$80,966	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$64,693	\$81,208	N/A	N/A

### **Clam & Yellow Rivers, McKenzie & Turtle Creeks – Barron, Polk Co.**

#### **Contact:**

**Richard Cornelius**

#### **Funding Status: Begins 2002**

There has been considerable investment in trout habitat improvement in the St. Croix basin. Habitat improvement has occurred on these four streams during different time periods. Electrofishing surveys were done in the early part of the 2002-03 biennium on selected stations of four streams to evaluate the short and long-term impact of instream habitat improvement on trout populations. These surveys replicated surveys done prior to habitat improvement to facilitate comparison. The report on the Clam River is completed and established that there is wide fluctuation in brook trout populations however, it is not clear what impact habitat improvement has on these fluctuations.

### **Badger Mill Creek – Dane Co.**

**Contact: David Marshall & Scot Stewart**

#### **Funding Status: Begins 2000**

The goal of this study is to assess brown trout stocking efforts and impacts of a 3 million-gallon per day treated wastewater effluent discharge to the stream. Preliminary results suggest that brown trout numbers did not decline, however chemical characteristics of the discharge has significantly reduced typical cold water forage species such as mottled sculpin.

### **Brewery, Spring Creeks -- Dane, Columbia Co.**

**Contact: David Marshall**

#### **Funding Status: Begins 2002**

**Partners: Friends of Scenic Lodi Valley, Dane Co.**

Spring Creek is a high quality Class II trout stream in Dane and Columbia Counties. Periodic poor water quality has concerned The Friends of Scenic Lodi Valley and DNR biologists. This project will evaluate habitat and water quality of a major tributary and headwaters of Spring Creek to determine potential for expanded trout habitat and possible factors affecting trout in current managed fishery area.

### **Fryes Feeder, Deer Creek, and West Branch Sugar River – Dane Co.**

**Contact: Mike Sorge**

#### **Funding Status: Begins in 2002**

This study will produce data that will be used to document the changes that have occurred in the following areas: habitat, fish community, trout population, and macroinvertebrate community. It will hopefully show how effective the habitat rehabilitation is on these streams.

### **Gordon, Big Spring, German Valley Creeks – Dane, Iowa Co.**

**Contact: David Marshall**

#### **Funding Status: Begins 2002**

The primary goal of this project is to evaluate the condition of these streams and potential for supporting brook trout populations. Sampling efforts will include extensive stream shocking surveys and standard wadeable monitoring protocols.

### **Lower Wisconsin River – Grant-Platte-Sugar-Pecatonica River Basins – Dane, Iowa, Green Co**

**Contact: David Marshall**

**Funding Status: Complete**

This Cold Water Habitat Evaluation Project was designed to evaluate the health of selected trout streams in the Lower Wisconsin and Grant-Platte-Sugar-Pecatonica River Basins. Water staff recommended monitoring streams with suspected water quality problems and where recent data were needed. External partners recommended other streams over concerns for declining water quality or

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<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead

trout populations. While trout enthusiasts requested information for particular streams, this report presents data collected from all of the streams so that comparisons can be made across watersheds.

The streams that were monitored were not chosen randomly or necessarily reflect all coldwater resources in southwest Wisconsin. Rather, the streams were selected because of strong public interest and concerns over water quality threats. A wide spectrum of human impacts on the streams were monitored including: historic mining wastes (Rountree Branch), point source pollution (Smith Conley Creek), agricultural runoff pollution (Brewery Creek and Castle Rock Creek), urban runoff pollution (Badger Mill Creek, Lodi Creek, and Rountree Branch) and PL566 dams (Otter Creek, Trout Creek and Honey Creek). Recent and past fishery information indicates improved water quality in Brewery Creek due to increased baseflow and improved land use practices. Harker Creek displayed the best cold water habitat conditions of the streams sampled for this project.

**Springhead Ponds – Dane, Iowa, Green Co.**

**Contact: David Marshall**

**Funding Status: Begins 2002**

Recent aquaculture industry reports challenge the long-term policies of regulating pond outlets and discouraging springhead pond construction. These long-term policies have been designed to protect habitat of cold water streams. In cooperation with pond owners, this study seeks to evaluate the pond conditions and discharge characteristics as well as potential impacts to cold water streams. Staff will collect vertical pond profile data, outlet structure type, and discharge information that can be used to better establish regulating policies.

**Token Creek & Harbison Tributary – Dane Co.**

**Contact: Mike Sorge**

**Funding Status: Begins in 2002**

Token Creek was selected as an Army Corps of Engineers "Ecosystem Restoration Project" in the fall of 1998. Under this project, DNR staff will be collecting data at seven locations throughout the stream. After analysis, this work will hopefully lead to a successful brook trout restoration program.

**Headwaters Basin — Forest, Florence, Langlade, Lincoln, Oneida Co.**

**Contact: Dave Brum**

**Funding Status: Begins 2002**

This is a basin wide project involving 18 candidate streams in the five counties above. An appropriate number of summer survey stations will be established on each candidate stream to establish current fish community composition and abundance as well as current status of habitat. Staff will then prioritize surveyed segments for habitat protection/enhancement work. The next step will be to prescribe methods and develop work plans for future habitat restoration as necessary.

**Otter, Mill, Honey Creeks -- Iowa, Sauk Co.**

**Contact: David Marshall**

**Funding Status: Begins 2002**

**Partners: Iowa, Sauk Co, Trout Unlimited, UW Platteville**

This study seeks to determine methods to reduce downstream impoundment effects on cold water resources. Lake sampling coupled with engineering design may allow for mitigation of warm surface water discharges and anoxic polluted bottom discharges by modifying the outlet structures to some undetermined intermediate withdrawal depth.

**MacIntire Creek – Marinette, Oconto Co.**

**Contact: Cliff Sebero**

**Funding Status: Begins in 2002**

**Partners: US Forest Service, Coleman Lake Club**

This project will update the current information on the physical conditions of the trout streams in Marinette and Oconto Counties. Current information dates back to the mid 60's and early 70's. The information update existing data for determining areas in need of habitat improvement. Project activities will obtain more thorough scientific information relating to the physical characteristics of each stream inventoried. Problem areas requiring protection and/or enhancement will be identified and recorded. Fish habitat will be evaluated in designated stations according to guidelines developed by Simonson, Lyons and Kanehl (1994). A coldwater IBI-index of biotic integrity based on the fish populations is planned for each station. Physical dimensions (mapping) will be taken on each appointed stream from the mouth upstream to a point where any type of habitat enhancement will no longer be feasible. Elevations will be recorded to obtain gradient information of each stream. Each stream station will have water level checkpoints to assist in monitoring and evaluating habitat of

stream. Photographs will be taken of each station and segment of stream with obvious degraded habitat for future information.

**South Branch Oconto River – Oconto Co.**

**Contact: Cliff Sebero**

**Funding Status: Completed**

**Partners: US Forest Service, Menominee Indian Tribe**

This coldwater ecological survey project monitored, analyzed and evaluated the impacts a habitat improvement project has on a stream before, during and after the time of construction. The stream being studied in case was the South Branch Oconto located in northwestern Oconto county. Five sites were selected to conduct a fish Index of Biotic Integrity (IBI), invertebrate Hilsenhoff Biotic Index (HBI) and a habitat assessment. Two sites were below the habitat project area, one in project area and two above. Turbidity meters were also placed below and above habitat project before and after construction. Interested partners whom which provided assistance were the Menominee Indian Tribe and the US Forest Service.

A brief summary of the project follows:

- Using the Hilsenhoff Index all sites scored excellent water quality values before construction. Post habitat construction invertebrate samples are still being analyzed by UWSP. Spikes in turbidity were evident during habitat construction but returned to normal when construction stopped. Spikes were also evident during rain events and took longer to return to normal. Oxygen levels downstream from the habitat site appeared to maintain normal daily fluctuations during the entire construction period.
- The fish IBI check in the index station furthest downstream reviewed no change. The stations immediately above and below habitat project area showed a slight decrease. This was from a significant increase in warmwater minnows (blacknose dace and creek chubs). The decrease is believed to be caused by minnow movement out of the habitat site, both upstream and downstream, or a warm 1999 season resulting in higher minnow production. Although there was a slight decrease in the IBI stations nearest the habitat site, the trout population downstream from the habitat site showed no significant decreases in 2000.
- A final survey is planned in 2003 where the fish IBI, habitat assessment and invertebrate HBI again will be sampled as it normally takes three to five years for habitat and fish communities to stabilize following habitat work.

**South Branch Oconto River – Oconto Co.**

**Contact: Greg Kornely**

**Funding Status: Complete**

**Partners: Trout Unlimited Chapters**

Funds allocated under this project paid for the installation of a temporary weir that can be used to assess health and population trends in this important trout fishery. Much of the population in this stream is migratory and has a very defined spring upstream and fall downstream movement and is extremely difficult to evaluate using standard sampling gear. A weir is a necessary and effective way to conduct surveys and will allow monitoring not only in this biennium, but also in the future.

In the spring of 2001 the weir was installed and over 1,200 brown and brook trout were captured and tagged. A number of other sites were surveyed with both streamshockers and a miniboomshocker. Trout captured have been tagged. The brown trout ranged from 9 to 27 inches in length and the brook trout ranged from 9 to 16 inches in length. Extensive movement was documented. Biologists have received numerous tag returns from miles upstream the tagging site. One brook trout tag return came from the First South Branch Oconto River. This is an unusual occurrence. This effort should continue to give us valuable data for a number of years to come. The use of the weir is the best method to evaluate a trout population in a stream this large, where extensive movement of the trout fishery is known to occur.

**Milwaukee R. Basin – Fond Du Lac, Ozaukee, Sheboygan, Washington Co.**

**Contact: William Wawrzyn**

**Funding Status: Begins 2002**

There are only three class I brook trout streams comprising just 6.8 river miles that remain in the Milwaukee River Basin. In addition, there are 2 class II brook trout streams totaling 4.6 and 2 class II brown trout streams totaling 4.2 stream miles (Note: Actual total number of existing trout stream miles may be closer to 25 miles based on GIS ortho-aerial photograph interpretation). This project will update fish community and habitat conditions in the existing trout streams. In addition to the 15 miles of stream currently classified as trout stream, there are an additional 50 miles of stream that support “cool” or stenothermal (< 22oC) fish communities (e.g. mottled sculpin, northern redbelly dace). Based on casual field observations and discussions with county Land Conservation Department staff, some of these “cool” water streams may no longer be impacted by the same level of intensive agricultural land use practices that once governed these watersheds. The extent to which the habitat in these “cool” water streams might now support trout and other coldwater communities will be investigated. During the summer of 2001, 35 stream reaches along 15 streams were evaluated following protocol developed for wadable streams. Continuous logging thermistors were deployed and retrieved during the summer warming season at each of the stream reaches.

**Milwaukee River Basin, Mole Creek – Ozaukee Co.**

**Contact: William Wawrzyn**

**Funding Status: Begins 2002**

Mole Creek is a 5-mile long stream located in central Ozaukee Co. Baseline monitoring and continuous temperature logging results suggests that this stream may be capable of supporting a restored native brook trout population. This project will evaluate fish and other aquatic life communities and habitat. Continuous temperature will be logged at 1-mile intervals (5 sites). Landscape features (e.g. channelization, enlargements, ponds, dams and other hydraulically significant manmade features) will be located, described and potential impacts assessed.

**Buena Vista Marsh – Wood, Portage Co.**

**Contact: Tom Jerow**

**Funding Status: Begins 2000**

The Buena Vista Partnership project addresses the issues of changing agricultural land and water uses in the Portage County Drainage District and its watersheds as well as the impact these changes can have on water quality, competition for water and the impact on brook trout populations. Trout Stamp funds supported design, test and study of temporary trout habitat structures used in streams while the ditches of Buena Vista Marsh are periodically cleaned in order to provide drainage for important agricultural lands. This study is key to preserve the ecosystem of Buena Vista Marsh and yet maintain the agricultural systems that support many jobs in Central Wisconsin.

**Ditches 2, 4& 5, Portage Co.**

**Contact: Al Hauber**

**Funding Status: Begins 2002**

Several ditches within the Portage County Drainage District (PCDD) have not been dredging for over 30 years but are undergoing or scheduled to undergo maintenance dredging. This study will assess short term and long term impacts of dredging on habitat and the fishery on Class I waters by using the established stream monitoring protocol. Also, the study will assess the rate of recovery of habitat and the fishery following dredging. First year sampling is completed.

**Namekagon River/Soft Maple Creek -- Sawyer, Rusk Co.**

**Contact: Frank Pratt**

**Funding Status: Complete**

**Partners: U.S. Park Service, Minnesota DNR, Rusk Co., Trout Unlimited**

This evaluation involves implementing the recommendations and workplan actions from the comprehensive plans prepared for these streams. For the Namekagon River, the plan is to work with partners to complete the St. Croix Fisheries plan for public review, continue coldwater monitoring and initiate appropriate habitat restoration efforts. For Soft Maple Creek, staff will continue habitat restoration, repeat stream monitoring surveys and assist private riparians in zoning, acquisition and habitat restoration. Progress to date:

Namekagon Draft plan has completed agency review with minor revisions. USPS plans to initiate public review winter of 2001-2002. Two of the implementation strategies, restoration of Schultz

Springs (2002) (See above) and experimental placement of big woody cover in Lenroot reach, Namekagon (2003)) have already been started. Select stream monitoring stations on Soft Maple Creek were revisited in 2000-2001. Although biological indices showed marked improvement in the coldwater fish component, biologists are confident that the response was NOT a result of the ongoing watershed management. Three 100-200 year floods in 1.5 years have blown out the stream channels in much of this watershed. Brook trout and mottled sculpin benefited most, at least initially, from flushing and exposure of hard substrates. These streams habitat/morphology are now in a state of disequilibrium. It may take years for the habitat to fully recover and it is doubtful if instream modifications are appropriate. The whole experience undermines the value of the watershed management approach. Land management practices to lessen run-off, appear to be the best long-term strategy.

**Deerskin River/Flowage – Vilas Co.**  
**Funding Status: Complete**

**Contact: Wes Jahns**

The Deerskin River is 14.1 miles long and provides the best trout fishery in Vilas County. The goal of this project was to assess the fisheries and aquatic habitat within the drawn-down flowage and establish baseline stream data in July of 2000. The plan called for the establishment of a sampling station within the area drawn down by the removal of the dam. Due to public opposition and political interests the dam was not removed until June 2001. Sampling stations were established above and below the dam and fisheries data collected for comparison with post dam removal. The pre and post dam removal comparison could not be made due to the delay in getting the dam removed. A decision has been made to allow time for the area within the drawdown to stabilize and establish a channel before sampling continues.

**Upper Wisconsin Basin.**  
**Funding Status: Complete**

**Contact: Peter Segerson**

Surveys were made to sample conditions for instream habitat work on the N. Branch Prairie River, Prairie River, Big Pine Creek, W. Branch. Eau Claire River, Red River, Mayking River and East Branch Eau Claire River. Maxwell Springs, Trout Springs, and Willow Springs were evaluated as candidates for rehabilitation using a cutterhead hydraulic dredge.

## Brook Trout Restoration

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$24,615	\$24,615	\$0	\$0
Actual IWTS Expenditure <sup>6</sup>	\$55,243	\$33,376	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$71,400	\$79,411	N/A	N/A

**Raccoon Creek – Rock Co.**  
**Funding Status: Complete**

**Contact: Don Bush**  
**Partners: Trout Unlimited, Rock Co Land Conservation**

Raccoon Creek, one of only three trout streams in Rock County, almost certainly had a pre-settlement population of brook trout. In the past, agricultural activity has degraded the stream. Today, it is protected rather nicely through wetland protection rules, state ownership and changes in agricultural practices resulting in a reduction in grazing and row cropping. In the first year of this project, a feasibility analysis of the stream and the watershed was done. It was determined that trout would not survive in the west branch of the stream, and the east branch (Paddock Creek) was chosen for stocking.

Local residents and the conservation congress have been polled to measure support for a regulation change. Support has been strong. A recommendation has been submitted to open the stream for “no kill” fishery for brook trout. The ultimate goal is to establish a naturally reproducing fishery with a species assemblage and size structure characteristic of pre-settlement.

Water quality, temperature, flow, invertebrates and fishery analysis (species composition and size structure) were completed. Coordination with landowners was done to establish a cooperative management approach. A partnership arrangement with Rock County Land Conservation has been established to improve runoff and soil loss conditions. Contacts with the Blackhawk Chapter of Trout Unlimited have been established and are an on-going activity. Following all the basic work and evaluation, a Feasibility Study for Establishing a Brook Trout Population in Raccoon Creek, Rock County was completed. Native Brook Trout were planted in September of 2001.



**DNR Biologist Don Bush Stocks Trout in Raccoon Creek**

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<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead



The wording of the newly proposed “No Kill” and “Artificial Baits Only” fishing regulations has been accepted by the department and will be introduced to the Conservation Congress during the spring 2002 hearings. There has been an ongoing dialogue and sharing of information with an Illinois citizen’s group that has been conducting a base line study of the Illinois portion of Raccoon Creek. Contacts were established with both the Oak Brook and Lee Wulf chapters of Trout Unlimited in Northern Illinois. Interest in financial assistance and supplying work-force personnel has been high. An Ordinary High Water Mark determination workshop was conducted on the creek and was attended by citizens of the watershed. A Raccoon Creek Citizen Advisory Committee has been established to evaluate potential watershed and waterway improvements. This committee was successful in receiving a River Protection Grant from the WIDNR. The River Management Society and the American Rivers Network through the guise of the Wisconsin River Alliance designated Raccoon Creek as one of the few waters in Wisconsin to participate in the Rivers – Pass the Paddle event. The traveling paddle was dipped into all waters recognized as significant natural resources.

**Upper Pine River – Waushara Co.**  
**Funding Status: Ongoing**

**Contact: Al Niebur**

In trout streams of the lower Wolf Basin and Upper Fox Basin, brook trout populations have been dramatically reduced or relegated to the smaller headwater reaches due to a combination of factors favoring the brown trout. In Waushara County only 4 streams, (Carter, Cedar Springs, Little Silver, and Porter's Creeks) representing 12.1 miles, sustain brook trout populations. Brook trout and brown trout coexist in 25 of the remaining 29 streams (approx. 129 miles) but brook trout are common in very small portions of the headwater reaches. In cooperation with DNR research specialists and partners this project will use physical removal of brown trout using electrofishing gear to restore native brook trout populations in the Upper Pine River (approx. 5 miles). In September 1997, DNR conducted mark recapture estimates using multiple capture techniques for all trout species in the Upper Pine River and Soules Creek. All brown trout captured in the Upper Pine River were removed and transferred to other streams and/or lakes. Data collected included index of biotic integrity scores, population estimates, length/weight, and daily temperature. The project continues in FY00-01 with spring/fall trout population surveys and removal of brown trout.

Thus far, surveys have shown dramatic recovery of brook trout populations. Brook trout populations in the lower reaches of the Upper Pine River are successfully reproducing and exhibit good size structure. Since 1997, adult brook trout numbers have increased 54% and recruitment has increased by nearly 41%. Currently, activities are focused on monitoring and evaluating habitat restoration efforts.

# Inland Waters Trout Stamp Program Administration

## Administer the Inland Waters Trout Stamp Program

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$6,200	\$6,000	\$6,000	\$6,000
Actual IWTS Expenditure <sup>6</sup>	\$4,789	\$5,492	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$6,189	\$5,508	N/A	N/A

**Funding Status: Ongoing**

**Contact: Larry Claggett**

This project covers costs associated with the judging the stamp design and selection process as well as printing of the Inland Waters Trout Stamp.

## Inland Waters Trout Stamp Expenditure Report And Plan

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure <sup>5</sup>	\$6,000	\$0	\$0	\$0
Actual IWTS Expenditure <sup>6</sup>	\$4,583	\$4,031	N/A	N/A
Total Program Expenditures (all funding sources) <sup>6</sup>	\$5,924	\$4,043	N/A	N/A

**Contact: Larry Claggett.**

**Funding Status: Begins in FY00, occurs each even year thereafter** These expenses cover the costs of limited term employees to perform research and gather data, then write and assemble this Inland Waters Trout Stamp Expenditure Report.

## Permanent Employee Salaries

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Year	FY 00	FY 01	FY 02	FY 03
Budgeted IWTS Expenditure	\$255,100	\$231,699	\$292,427	\$298,722

(Note: Planned expenditure figures are offered here for reference. In actuality, permanent employee salaries are spread across the appropriate projects listed above and are accounted for in the total program expenditure figures for those projects.)

**Funding Status: Ongoing**

IWTS funds pay for salaries of 9.34 full time equivalent DNR permanent staff members throughout the state who work on inland waters trout programs.

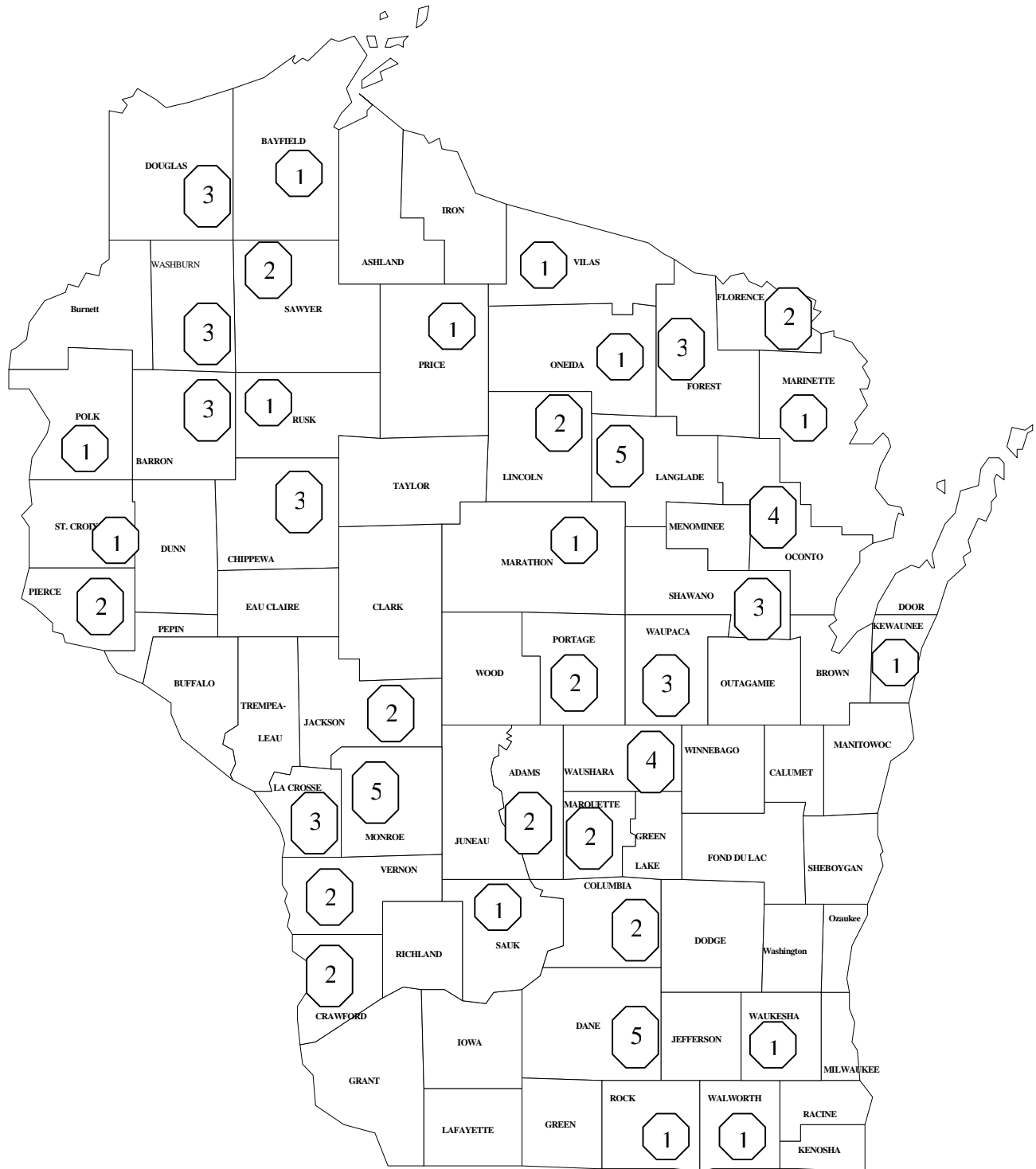
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<sup>5</sup> LTE salaries & supplies

<sup>6</sup> LTE salaries, supplies, permanent salaries, fringe benefits & program overhead

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## Inland Water Trout Supported Projects FY 2000 & 2001 by County



## Hydrographic Map of Wisconsin Trout Streams

